

**DRAFT**  
**MODIFIED HAZARDOUS WASTE OPERATING**  
**PERMIT**

**GEORGIA GULF CHEMICALS & VINYL, LLC**  
**PLAQUEMINE, LOUISIANA**  
**LAD 057117434-OP-RN-1-MO-1**  
**AI#2455 / PER20070013**

**RECORD CENTER COPY**



## DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO

GOVERNOR

MIKE D. McDANIEL, Ph.D.

SECRETARY

Mr. Dennis Fec  
Environmental Manager  
Georgia Gulf Chemicals & Vinyls, LLC  
P.O. Box 629  
Plaquemine, LA 70765

RE: Draft Modified Hazardous Waste Operating Permit  
Georgia Gulf Chemicals & Vinyls, LLC (Georgia Gulf) – Plaquemine Facility  
LAD0057117434 / AI#2455 / PER20070013

Dear Mr. Fec:

Attached, is your copy of the Georgia Gulf's draft modified hazardous waste operating permit, LAD057117434-OP-RN-1-MO-1, which contains language pertaining to the operation of hazardous waste storage tanks and the industrial furnace at the Georgia Gulf's Plaquemine Facility. The draft modified hazardous waste operating permit includes several proposed modified permit conditions based on additional information provided by Georgia Gulf to the Department.

A comment period of forty-five (45) days will be allowed in order for the public to review and comment on this draft modified hazardous waste operating permit. The dates for the beginning and ending of the comment period are contained in the attached public notice. If the Department finds a significant degree of public interest, a public hearing will also be scheduled at least forty-five (45) days after the date on which the public notice is given. The date, time and location of the public hearing, if requested, will be specified in the public notice announcement of the public hearing.

Prior to taking a final action on the draft modified hazardous waste operating permit, the Administrative Authority will consider all significant comments submitted on this action. Written comments must be submitted no later than 12:30 p.m. on the final day of the comment period. The issuance of the final permitting decision will be in accordance with LAC 33:V.705.

Please reference your Agency Interest Number (2455), EPA ID Number (LAD057117434), and Permit Activity Number 20070013 on all future correspondence pertaining to this matter. If you have any questions, please contact Mr. Craig Easley of the Waste Services Section at (225) 219-3050 or Ms. Soumaya Ghosn of the Public Participation Group at (225) 219-3276.

Sincerely,

Bijan Sharafkhani, P.E.  
Administrator  
Waste Permits Division

kce

Attachment

c: Kishor Fruitwala – EPA Region 6

**ENVIRONMENTAL SERVICES**

: PO BOX 4313, BATON ROUGE, LA 70821-4313

P:225-219-3181 F:225-219-3309

WWW.DEQ.LOUISIANA.GOV

# FACT SHEET

# **FACT SHEET**

**FOR THE DRAFT MODIFIED OPERATING PERMIT  
PREPARED FOR**

**GEORGIA GULF CHEMICALS & VINYL, LLC  
Plaquemine Facility**

**EPA ID# LAD057117434  
Agency Interest # 2455  
PER20070013**

**Plaquemine, Louisiana  
Iberville Parish**

**Permit Number LAD057117434-OP-RN-1-MO-1**

## **I. INTRODUCTION**

This fact sheet has been developed in accordance with the Louisiana Administrative Code (LAC) 33:V.703.D and briefly sets forth principal and significant facts, legal, methodological and policy requirements of the proposed draft modified hazardous waste operating permit for Georgia Gulf Chemicals & Vinyls, LLC (Georgia Gulf), EPA ID Number LAD057117434, for the facility located in Plaquemine, Iberville Parish, Louisiana.

In accordance with LAC 33:V.323.B.2.a and LAC 33:V.323.B.2.c.ii, the Administrative Authority is proposing several modified permit conditions based on additional information provided by Georgia Gulf justifying the application of the modified permit conditions. The proposed draft modified hazardous waste operating permit includes several revised permit conditions to the operating renewal permit which became effective on October 28, 2007. Specific information regarding the proposed modified permit conditions is contained in Part III of this fact sheet.

The proposed draft modified permit addresses the requirements of LAC 33:V, Subpart 1 and the Resource Conservation and Recovery Act (RCRA).

## **A. THE PERMITTING PROCESS**

The purpose of this fact sheet is to initiate the permit decision process. The Waste Permits Division of the Louisiana Department of Environmental Quality (LDEQ) has determined that the proposed permit modifications constitute a Class 3 modification and, therefore, has prepared a draft permit in accordance with LAC 33:V.323.B.2.a and LAC 33:V.703.C. The draft permit incorporates the proposed modifications and sets forth all applicable conditions with which the Permittee must comply during the life of the permit.

The permitting process will afford the LDEQ, interested citizens, and other agencies the opportunity to evaluate the ability of the Permittee to comply with the requirements of the LAC 33:V, Subpart 1.

The public is given a minimum of forty-five (45) days to review and comment on the draft modified permit. The Administrative Authority, prior to making a decision or taking any final action on the draft modified permit, will consider all significant comments. The decision of the Administrative Authority shall be to issue, deny, modify, or revoke the draft modified permit in accordance with LAC 33:V.705.

**B. DRAFT MODIFIED PERMIT**

The Administrative Authority has reviewed all pertinent technical information regarding the proposed revised permit conditions and has made a tentative determination that the proposed revised permit conditions are warranted. Therefore, the LDEQ has prepared a draft modified permit setting forth certain specific conditions pertaining to the operation, maintenance, and closure of the listed facilities.

This draft modified permit is a tentative determination and is not the final decision of the Administrative Authority.

**C. PUBLIC COMMENT PERIOD**

LAC 33:V.715 requires that the public be given forty-five (45) days to comment on each draft modified permit prepared under the authority of the LDEQ.

The specific dates for the opening and closing of the public comment period are contained in the public notice that was issued for this particular permitting action. Any person interested in commenting on the strikeouts and/or the underlined text of the draft modified permit must do so within this comment period. Only the modified text of the draft modified permit (underlined and/or struck out) is open for comment.

A public hearing may be held, if requested, or if the draft permit generates a significant amount of public interest, on the date, at the location and time provided in the public notice of the hearing. LDEQ will hold the hearing within forty-five (45) days after public notice of the hearing.

Public notice of the proposed permitting action and of the hearing shall be published in specified newspapers, announced on the designated radio station, and mailed to those persons contained on the facility's mailing list.

#### **D. LOCATIONS OF AVAILABLE INFORMATION**

The administrative record for Georgia Gulf Chemicals & Vinyls, LLC, including the draft modified permit and supporting documents are on file at the LDEQ, Public Records Center, 1<sup>st</sup> Floor, 602 N. Fifth Street, Baton Rouge, Louisiana.

These documents are available for review and copying (all documents copied will be subject to a \$0.25 charge per copy page). Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday-Friday (except holidays).

In addition, a copy of the draft modified permit, fact sheet, and supporting documents are available for review at the **Iberville Parish Library, Parish Headquarters Library, 24605 J. Gerald Berret Blvd., Plaquemine, Louisiana 70764-0736.**

#### **E. WRITTEN COMMENT SUBMISSION**

Interested persons may submit written comments on the draft modified permit to the Administrative Authority, at the address listed below, no later than 12:30 p.m., Soumaya Ghosn, P.O. Box 4313, Baton Rouge, LA 70821-4313.

All comments should include the name and address of the writer and a concise statement of the exact basis for any comment and supporting relevant facts upon which the comment is based.

Any technical questions regarding this draft modified permit should be addressed to:

Mr. Craig Easley  
Louisiana Department of Environmental Quality  
Office of Environmental Services  
Waste Permits Division  
Post Office Box 4313  
Baton Rouge, Louisiana 70821-4313  
(225) 219-3050 or fax (225) 219-3158

## **II. DESCRIPTION OF OVERALL SITE**

Georgia Gulf Chemicals & Vinyls (Georgia Gulf) is the owner and operator of the Georgia Gulf - Plaquemine Facility. The facility manufactures both organic and inorganic compounds such as: phenol, acetone, alpha-methyl styrene, polyvinyl chloride (PVC), sodium hydroxide, chlorine, ethylene dichloride (EDC), and vinyl chloride monomer (VCM). The facility has been in operation as part of Georgia Gulf since January 1, 1985. Georgia Gulf's Plaquemine facility generates hazardous wastes incidental to its chemical manufacturing operations. After generation, all of Georgia Gulf's hazardous wastes are stored onsite before ultimate treatment, recycling, and/or disposal onsite or offsite.

### III. HAZARDOUS WASTE FACILITIES

Georgia Gulf has an effective hazardous waste operating permit (LAD057117434-OP-RN-1) governing operation of eight (8) hazardous waste units at its Plaquemine facility: seven (7) hazardous waste tanks and the industrial furnace. The hazardous waste operating permit became effective October 28, 2007. Subsequent to the hazardous waste operating permit becoming effective, Georgia Gulf provided additional information to the Administrative Authority that addressed several of the permit conditions in the effective hazardous waste operating permit. A review of the information provided resulted in the Administrative Authority initiating a Class 3 draft modified permit in accordance with LAC 33:V.323.B.2.a and LAC 33:V.703.C. The draft modified permit includes several proposed modified permit conditions which take into account and address the facts provided in the Georgia Gulf's additional information submittals dated October 26, 2007, and November 29, 2007. A summary of the rationale for the proposed modifications is detailed below.

The "Draft Modified Operating Permit" addresses the following proposed modifications:

- Condition V.A.6.e.(1)(b) of the draft modified permit has been revised to require internal inspection of the hazardous waste storage tanks every ten (10) years rather than every (5) years as specified in the current effective permit. The condition was revised based on information provided by Georgia Gulf demonstrating that a 10-year internal inspection frequency is consistent with the American Petroleum Institute (API) inspection standards applicable to the hazardous waste storage tanks.
- Condition V.C.2.a.(2) and Table 7 of the draft modified permit have been revised by replacing the Group A Parameter Limit "Maximum Forced Draft Fan Flow" with "Maximum Combustion Air Flow Rate". This change was made due to the fact that the flow monitor assuring compliance with this parameter limit actually measures the flow rate of combustion air rather than draft fan or stack flow rate as in the current effective permit. By making this revision, the computer data collection values will be consistent with the actual parameter limit as stated in the permit. During the June 1998 Industrial Furnace Trial Burn, Georgia Gulf utilized "combustion air flow rate" (as measured by flow monitor FC 5495) as a surrogate measurement of "stack flow rate". During the trial burn, Georgia Gulf successfully demonstrated an average maximum combustion air flow rate of 53,000 Mlbs/hr. The value of maximum combustion air flow rate was correlated to an average stack flow rate of 14,939.60 DSCFM. The stack flow rate was measured by directly sampling the stack during the execution of the trial burn and was calculated using EPA Method 2. A footnote was added to Table 7 stating that a combustion air flow rate of 53,000 Mlbs/hr correlated to a stack flow rate of 14,939.60 DSCFM.
- Condition V.C.2.b.(5) and Table 8 of the draft modified permit have been revised to utilize Tier I rural emission limits for the industrial furnace rather than Tier I urban limits as in the current effective operating permit. EPA (40 CFR 68.22(e)) has defined "urban" as terrain with many obstacles (e.g., buildings, trees, hills, etc.) in the

immediate area. EPA goes on to define "rural" as terrain that is generally flat and unobstructed. Based on additional information supplied by Georgia Gulf and an assessment of the topography and land use in the area surrounding Georgia Gulf's Plaquemine Facility, the Administrative Authority made the determination that Tier I rural limits were more appropriate for the industrial furnace than Tier I urban emission limits. Therefore, Condition V.C.2.b.(5) and Table 8 of the draft modified permit were revised accordingly.

#### **IV. FINANCIAL AND LIABILITY REQUIREMENTS**

Georgia Gulf has submitted documentation to satisfy the financial assurance and liability requirements of LAC 33:V.Chapter 37.



# **MODIFICATION AUTHORIZATION**

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY

MODIFIED PERMIT

MODIFICATION AUTHORIZATION

PERMITTEE: GEORGIA GULF CHEMICALS & VINYLs, LLC

PERMIT NUMBER: LAD057117434-OP-RN-1-MO-1

AGENCY INTEREST: AI 2455

PERMIT ACTIVITY NO.: PER 20070013

FACILITY: IBERVILLE PARISH

LOCATION: P.O. BOX 629  
26100 HIGHWAY 405  
PLAQUEMINE, LOUISIANA 70764

This modification applies to the permit LAD057117434-OP-RN-1 issued by the Louisiana Department of Environmental Quality (LDEQ) under the authority of the Louisiana Hazardous Waste Control Law R.S. 20:2171 et seq., and the regulations adopted thereunder to Georgia Gulf Chemicals & Vinyls, LLC, (hereafter called the Permittee), to operate a hazardous waste Treatment, Storage, and Disposal facility (TSD) Louisiana, at latitude 30° 16' 30" and longitude 91° 10' 30" and which became effective October 28, 2007.

For the purposes of this permit, the "Administrative Authority" shall be the Secretary of the Louisiana Department of Environmental Quality, or his/her designee.

The Permittee must comply with all terms and conditions of this permit as modified according to the procedures and under the authority of the Louisiana Administrative Code (LAC) 33:V, Chapter 3. This permit consists of the conditions contained herein and the applicable regulations as specified in the permit. Applicable regulations are those which are in effect on the date of issuance of this permit.

This permit is based on the assumption that the information provided to LDEQ by the Permittee is accurate. Further, this permit is based in part on the provisions of Sections 206, 212, and 224 of the HSWA of 1984, which modify Section 3004 and 3005 of RCRA. In particular, Section 206 requires corrective action for all releases of hazardous waste or constituents from any solid waste management unit at a treatment, storage or disposal facility seeking a permit, regardless of the time at which waste was placed in such unit.

Section 212 provides authority to review and modify the permit at any time. Any inaccuracies found in the submitted information may be grounds for the termination, modification, revocation, and reissuance of this permit (see LAC 33:V.323) and potential enforcement action. The Permittee must inform the LDEQ of any deviation from or changes in the information in the application, which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This modified permit shall be effective as of \_\_\_\_\_, and shall remain in effect until \_\_\_\_\_, unless revoked, reissued, modified or terminated in accordance with LAC 33:V.323 and 705. The Administrative Authority may issue any permit for a duration that is less than the maximum term of ten (10) years and the term shall not be extended beyond the maximum duration by modification in accordance with LAC 33:V.315.

Provisions of this permit may be appealed in writing pursuant to LA. R.S. 30:2024(A) within thirty (30) days from receipt of the permit. Only those provisions specifically appealed will be suspended by a request for hearing, unless the secretary or the assistant secretary elects to suspend other provisions as well. A request for hearing must be sent to the following:

LA. Department of Environmental Quality  
Office of the Secretary  
Attention: Hearing Clerk, Legal Services Division  
Post Office Box 4302  
Baton Rouge, Louisiana 70821-4302

DRAFT

\_\_\_\_\_  
Chuck Carr Brown, Ph.D., Assistant Secretary  
Louisiana Department of Environmental Quality

\_\_\_\_\_  
Date

# **PUBLIC PARTICIPATION**

**PUBLIC NOTICE**  
**LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY (LDEQ)**  
**GEORGIA GULF CHEMICALS & VINYLs, LLC, PLAQUEMINE FACILITY**  
**DRAFT CLASS 3 HAZARDOUS WASTE OPERATING PERMIT MODIFICATION**

The LDEQ, Office of Environmental Services, is accepting written comments on a draft Class 3 hazardous waste operating permit modification for Georgia Gulf Chemicals & Vinyls, LLC (Georgia Gulf), P.O. Box 629, Plaquemine, Louisiana 70765 for the EDC Basin and Associated Ditches. **The facility is located at 26100 Highway 405, Plaquemine, Iberville Parish.**

In accordance with LAC 33:V.323.B.2.a and LAC 33:V.323.B.2.c.ii, the Administrative Authority is proposing several modified permit conditions based on additional information provided by Georgia Gulf justifying the application of the modified permit conditions. The proposed draft modified hazardous waste operating permit includes several revised permit conditions to the operating renewal permit which became effective on October 28, 2007. Additions and deletions to the original text of the permit are noted by underlining additions and strikethrough of deletions.

Subsequent to the hazardous waste operating permit becoming effective, Georgia Gulf provided additional information to the Administrative Authority that addressed several of the permit conditions in the effective hazardous waste operating permit. A review of the information provided resulted in the Administrative Authority initiating the draft modified hazardous waste operating permit in order to propose several modified permit conditions which take into account and address the facts provided in the Georgia Gulf's additional information submittals. The proposed modifications include: 1) requiring internal inspections of hazardous waste storage tanks in accordance with the applicable American Petroleum Institute (API) standards; 2) utilizing Tier I rural emission limits for the industrial furnace rather than Tier I urban limits; and 3) replacing the Group A Parameter Limit "Maximum Forced Draft Fan Flow" with "Maximum Combustion Air Flow Rate". A detailed description of the proposed permit modifications and the appropriate justifications can be found in the fact sheet included in the draft modified hazardous waste operating permit.

Written comments, written requests for a public hearing, or written requests for notification of the final decision regarding this permit action may be submitted to Ms. Soumaya Ghosn at LDEQ, Public Participation Group, P.O. Box 4313, Baton Rouge, LA 70821-4313. **Written comments and/or written requests must be received by 12:30 p.m., Monday, March 17, 2008.** Written comments will be considered prior to a final permit decision.

If LDEQ finds a significant degree of public interest, a public hearing will be held. LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The draft hazardous waste operating permit modification is available for review at the LDEQ, Public Records Center, Room 127, 602 North 5<sup>th</sup> Street, Baton Rouge, LA. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). **The available information can also be accessed electronically on the Electronic Document Management System (EDMS) on the DEQ public website at [www.deq.louisiana.gov](http://www.deq.louisiana.gov).**

Additional copies may be reviewed at the Iberville Parish Library, Parish Headquarters Library, 24605 J. Gerald Berret Blvd., Plaquemine, Louisiana 70764-0736.

This is the first public notice for this action.

Inquiries or requests for additional information regarding this permit action should be directed to Mr. Craig Easley, LDEQ, Waste Permits Division, P.O. Box 4313, Baton Rouge, LA 70821-4313, phone (225) 219-3050.

Persons wishing to be included on the LDEQ permit public notice mailing list or for other public participation related questions should contact the Public Participation Group in writing at LDEQ, P.O. Box 4313, Baton Rouge, LA 70821-4313, by email at [deqmaillistrequest@la.gov](mailto:deqmaillistrequest@la.gov) or contact the LDEQ Customer Service Center at (225) 219-LDEQ (219-5337).

**Permit public notices including electronic access to the draft permit and associated information** can be viewed on the LDEQ permits public webpage at [www.deq.louisiana.gov/apps/pubNotice/default.asp](http://www.deq.louisiana.gov/apps/pubNotice/default.asp) and general information related to the public participation in permitting activities can be viewed at [www.deq.louisiana.gov/portal/tabid/2198/Default.aspx](http://www.deq.louisiana.gov/portal/tabid/2198/Default.aspx).


Alternatively, individuals may elect to receive the permit public notices via email by subscribing to the LDEQ permits public notice List Server at [www.doa.louisiana.gov/oes/listservpage/ldeq\\_pn\\_listserv.htm](http://www.doa.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm)

**All correspondence should specify AI Number 2455, Permit Number LAD057117434-OP-RN-1-MO-1, and Activity Number PER20070013.**

**Scheduled Publication Date: January 31, 2008**

# **PART A**

# **APPLICATION**

<b>SEND COMPLETED FORM TO:</b> The Appropriate State or EPA Regional Office.	United States Environmental Protection Agency <b>RCRA SUBTITLE C SITE IDENTIFICATION FORM</b>		
<b>1. Reason for Submittal</b> (See instructions on page 13.)  MARK ALL BOX(ES) THAT APPLY	<b>Reason for Submittal:</b> <input type="checkbox"/> To provide Initial Notification of Regulated Waste Activity (to obtain an EPA ID Number for hazardous waste, universal waste, or used oil activities) <input type="checkbox"/> To provide Subsequent Notification of Regulated Waste Activity (to update site identification information) <input type="checkbox"/> As a component of a First RCRA Hazardous Waste Part A Permit Application <input checked="" type="checkbox"/> As a component of a Revised RCRA Hazardous Waste Part A Permit Application (Amendment # _____) <input type="checkbox"/> As a component of the Hazardous Waste Report		
<b>2. Site EPA ID Number</b> (page 14)	<b>EPA ID Number</b> LA 1057117434		
<b>3. Site Name</b> (page 14)	<b>Name:</b> GEORGIA GULF CHEMICALS & VINYLs, LLC		
<b>4. Site Location Information</b> (page 14)	<b>Street Address:</b> 26100 LA HIGHWAY 405 SOUTH <b>City, Town, or Village:</b> PLAQUEMINE <b>State:</b> LA <b>County Name:</b> IBERVILLE <b>Zip Code:</b> 70764		
<b>5. Site Land Type</b> (page 14)	<b>Site Land Type:</b> <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		
<b>6. North American Industry Classification System (NAICS) Code(s) for the Site</b> (page 14)	<b>A.</b> 325111	<b>B.</b> 325181	<b>C.</b> 325211
<b>7. Site Mailing Address</b> (page 15)	<b>Street or P. O. Box:</b> P.O. BOX 629 <b>City, Town, or Village:</b> PLAQUEMINE <b>State:</b> LA <b>Country:</b> UNITED STATES OF AMERICA <b>Zip Code:</b> 70765		
<b>8. Site Contact Person</b> (page 15)	<b>First Name:</b> HILLARY	<b>MI:</b>	<b>Last Name:</b> GARNER
	<b>Phone Number:</b> (225)685-2632 <b>Extension:</b>	<b>Email address:</b>	
<b>9. Operator and Legal Owner of the Site</b> (pages 15 and 16)	<b>A. Name of Site's Operator:</b> GEORGIA GULF CHEMICALS & VINYLs, LLC <b>Date Became Operator (mm/dd/yyyy):</b> 01/01/1985 <b>Operator Type:</b> <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other <b>B. Name of Site's Legal Owner:</b> GEORGIA GULF CHEMICALS & VINYLs, LLC <b>Date Became Owner (mm/dd/yyyy):</b> 01/01/1985 <b>Owner Type:</b> <input checked="" type="checkbox"/> Private <input type="checkbox"/> County <input type="checkbox"/> District <input type="checkbox"/> Federal <input type="checkbox"/> Indian <input type="checkbox"/> Municipal <input type="checkbox"/> State <input type="checkbox"/> Other		



9. Legal Owner (Continued) Address	Street or P. O. Box: 400 PERIMETER CENTER TERRACE, SUITE 595	
	City, Town, or Village: ATLANTA	
	State: GEORGIA	
	Country: UNITED STATES OF AMERICA	Zip Code: 30348

## 10. Type of Regulated Waste Activity

Mark "Yes" or "No" for all activities; complete any additional boxes as instructed. (See instructions on pages 17 to 20.)

## A. Hazardous Waste Activities

Complete all parts for 1 through 6.

Y ☒ N ☐ 1. Generator of Hazardous Waste

If "Yes", choose only one of the following - a, b, or c.

☒ a. LQG: Greater than 1,000 kg/mo (2,200 lbs./mo.)  
of non-acute hazardous waste; or☐ b. SQG: 100 to 1,000 kg/mo (220 - 2,200 lbs./mo.)  
of non-acute hazardous waste; or☐ c. CESQG: Less than 100 kg/mo (220 lbs./mo.)  
of non-acute hazardous waste

In addition, indicate other generator activities.

Y ☐ N ☒ d. United States Importer of Hazardous WasteY ☐ N ☒ e. Mixed Waste (hazardous and radioactive) GeneratorY ☐ N ☒ 2. Transporter of Hazardous WasteY ☐ N ☒ 3. Treater, Storer, or Disposer ofHazardous Waste (at your site) Note: A  
hazardous waste permit is required for this  
activity.Y ☐ N ☒ 4. Recycler of Hazardous Waste (at your  
site)Y ☐ N ☒ 5. Exempt Boiler and/or Industrial Furnace

If "Yes", mark each that applies.

☐ a. Small Quantity On-site Burner  
Exemption☐ b. Smelting, Melting, and RefiningY ☐ N ☒ 6. Underground Injection Control

## B. Universal Waste Activities

Y ☒ N ☐ 1. Large Quantity Handler of Universal Waste (accumulate  
5,000 kg or more) [refer to your State regulations to  
determine what is regulated]. Indicate types of universal  
waste that apply:

## Manage

a. Batteries ☒b. Pesticides ☐c. Mercury containing equipment ☐d. Lamps ☒e. Other (specify) ☐f. Other (specify) ☐g. Other (specify) ☐Y ☐ N ☒ 2. Destination Facility for Universal Waste

Note: A hazardous waste permit may be required for this activity.

## C. Used Oil Activities

Mark all boxes that apply.

Y ☐ N ☒ 1. Used Oil Transporter

If "Yes", mark each that applies.

☐ a. Transporter☐ b. Transfer FacilityY ☐ N ☒ 2. Used Oil Processor and/or Re-refiner

If "Yes", mark each that applies.

☐ a. Processor☐ b. Re-refinerY ☐ N ☒ 3. Off-Specification Used Oil BurnerY ☐ N ☒ 4. Used Oil Fuel Marketer

If "Yes", mark each that applies.

☐ a. Marketer Who Directs Shipment of  
Off-Specification Used Oil to  
Off-Specification Used Oil Burner☐ b. Marketer Who First Claims the  
Used Oil Meets the Specifications

## 11. Description of Hazardous Wastes (See instructions on page 21.)

A. Waste Codes for Federally Regulated Hazardous Wastes. Please list the waste codes of the Federal hazardous wastes handled at your site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page if more spaces are needed.

D001	D002	D003	D007	D008	D009	D011
D018	D019	D021	D022	D026	D027	D028
D029	D032	D033	D034	D039	D040	D043

B. Waste Codes for State-Regulated (i.e., non-Federal) Hazardous Wastes. Please list the waste codes of the State-regulated hazardous wastes handled at your site. List them in the order they are presented in the regulations. Use an additional page if more spaces are needed for waste codes.


## 12. Comments (See instructions on page 21.)

Section 11, Box A (continued): F003, F024, F025, K019, K022, K174, U028, U037, U055, U188

13. Certification: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. For the RCRA Hazardous Waste Part A Permit Application, all operator(s) and owner(s) must sign (see 40 CFR 270.10 (b) and 270.11). (See instructions on page 21.)

Signature of operator, owner, or an authorized representative	Name and Official Title (type or print)	Date Signed (mm/dd/yyyy)
	<i>Charles P. Freeburgh Jr.</i>	
	Charles P. Freeburgh, General Manager	06/21/2007

United States Environmental Protection Agency  
HAZARDOUS WASTE PERMIT INFORMATION FORM

1. Facility Permit Contact (See Instructions on page 23)	First Name: Hillary	MI:	Last Name: Garner
	Phone Number: (225) 685-2632		Phone Number Extension:
2. Facility Permit Contact Mailing Address (See Instructions on page 23)	Street or P.O. Box: P.O. Box 629		
	City, Town, or Village: Plaquemine		
	State: LA		
	Country: United States of America	Zip Code: 70765	
3. Operator Mailing Address and Telephone Number (See Instructions on page 23)	Street or P.O. Box: P.O. Box 629		
	City, Town, or Village: Plaquemine		
	State: LA		
	Country: United States	Zip Code: 70765	Phone Number: (225) 685-2500
4. Legal Owner Mailing Address and Telephone Number (See Instructions on page 23)	Street or P.O. Box: 400 Perimeter Center Terrace, Suite 595		
	City, Town, or Village: Atlanta		
	State: GA		
	Country: United States	Zip Code: 30348	Phone Number: (770) 395-4500
5. Facility Existence Date (See Instructions on page 24)	Facility Existence Date (mm/dd/yyyy): 01/01/1985		
6. Other Environmental Permits (See Instructions on page 24)			
A. Permit Type (Enter code)	B. Permit Number		C. Description
N	LA DP 0057117434		NPDES Permit
R	P - 0173		Solid Waste Permit - Landfarm
R	P - 0192		Solid Waste Permit - VCM Wastewater
R	P - 0265		Solid Waste Permit - Surge Basin
See Section 14.			
7. Nature of Business (Provide a brief description; see instructions on page 24)			
<p>Georgia Gulf Chemicals &amp; Vinyls, LLC is a publicly held, integrated manufacturer of quality chemical and plastic compounds. GGCV integrated product line consist of electro-chemicals and aromatic chemicals. The electro-chemical product line includes caustic soda, chlorine, vinyl chloride monomer, and vinyl resin compounds. The aromatic chemical product line includes acetone, alpha-methyl styrene, cumene and phenol.</p>			

## 8. Process Codes and Design Capacities (See Instructions on page 24) - Enter information in the Sections on Form Page 3.

A. PROCESS CODE - Enter the code from the list of process codes in the table below that best describes each process to be used at the facility. Fifteen lines are provided for entering codes. If more lines are needed, attach a separate sheet of paper with the additional information. For "other" processes (i.e., D99, S99, T04 and X99), enter the process information in Item 9 (including a description).

B. PROCESS DESIGN CAPACITY - For each code entered in Section A, enter the capacity of the process.

1. AMOUNT - Enter the amount. In a case where design capacity is not applicable (such as in a closure/post-closure or enforcement action) enter the total amount of waste for that process.

2. UNIT OF MEASURE - For each amount entered in Section B(1), enter the code in Section B(2) from the list of unit of measure codes below that describes the unit of measure used. Select only from the units of measure in this list.

C. PROCESS TOTAL NUMBER OF UNITS - Enter the total number of units for each corresponding process code.

PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY	PROCESS CODE	PROCESS	APPROPRIATE UNITS OF MEASURE FOR PROCESS DESIGN CAPACITY
	<u>Disposal:</u>			<u>Treatment (continued):</u>	
D79	Underground Injection Well Disposal	Gallons; Liters; Gallons Per Day; or Liters Per Day	T81	Cement Kiln	For T81-T93:
D80	Landfill	Acres; Hectares; Acres; Cubic Meters; Hectares; Cubic Yards	T82	Lime Kiln	
D81	Land Treatment	Acres or Hectares	T83	Aggregate Kiln	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour
D82	Ocean Disposal	Gallons Per Day or Liters Per Day	T84	Phosphate Kiln	
D83	Surface Impoundment Disposal	Gallons; Liters; Cubic Meters; or Cubic Yards	T85	Coke Oven	
D99	Other Disposal	Any Unit of Measure in Code Table Below	T86	Blast Furnace	
	<u>Storage:</u>		T87	Smelting, Melting, or Refining Furnace	
S01	Container	Gallons; Liters; Cubic Meters; or Cubic Yards	T88	Titanium Dioxide Chloride Oxidation Reactor	
S02	Tank Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T89	Methane Reforming Furnace	
S03	Waste Pile	Cubic Yards or Cubic Meters	T90	Pulping Liquor Recovery Furnace	
S04	Surface Impoundment Storage	Gallons; Liters; Cubic Meters; or Cubic Yards	T91	Combustion Device Used in The Recovery Of Sulfur Values From Spent Sulfuric Acid	
S05	Drip Pad	Gallons; Liters; Acres; Cubic Meters; Hectares; or Cubic Yards	T92	Halogen Acid Furnaces	
S06	Containment Building Storage	Cubic Yards or Cubic Meters	T93	Other Industrial Furnaces Listed In 40 CFR §260.10	
S99	Other Storage	Any Unit of Measure in Code Table Below	T94	Containment Building - Treatment	Cubic Yards; Cubic Meters; Short Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Metric Tons Per Day; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour
	<u>Treatment:</u>			<u>Miscellaneous (Subpart X):</u>	
T01	Tank Treatment	Gallons Per Day; Liters Per Day	X01	Open Burning/Open Detonation	Any Unit of Measure in Code Table Below
T02	Surface Impoundment Treatment	Gallons Per Day; Liters Per Day	X02	Mechanical Processing	Short Tons Per Hour; Metric Tons Per Hour; Short Tons Per Day; Metric Tons Per Day; Pounds Per Hour; Kilograms Per Hour; Gallons Per Hour; Liters Per Hour; or Gallons Per Day
T03	Incinerator	Short Tons Per Hour; Metric Tons Per Hour; Gallons Per Hour; Liters Per Hour; Btu Per Hour; Pounds Per Hour; Short Tons Per Day; Kilograms Per Hour; Gallons Per Day; Liters Per Day; Metric Tons Per Hour; or Million Btu Per Hour	X03	Thermal Unit	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; or Million Btu Per Hour
T04	Other Treatment	Gallons Per Day; Liters Per Day; Pounds Per Hour; Short Tons Per Hour; Kilograms Per Hour; Metric Tons Per Day; Metric Tons Per Hour; Short Tons Per Day; Btu Per Hour; Gallons Per Day; Liters Per Hour; or Million Btu Per Hour	X04	Geologic Repository	Cubic Yards; Cubic Meters; Acres; Hectares; Hectare-meter; Gallons; or Liters
T80	Boiler	Gallons; Liters; Gallons Per Hour; Liters Per Hour; Btu Per Hour; or Million Btu Per Hour	X99	Other Subpart X	Any Unit of Measure Listed Below

UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE	UNIT OF MEASURE	UNIT OF MEASURE CODE
Gallons.....	G	Short Tons Per Hour.....	D	Cubic Yards.....	Y
Gallons Per Hour.....	E	Metric Tons Per Hour.....	W	Cubic Meters.....	C
Gallons Per Day.....	U	Short Tons Per Day.....	N	Acres.....	A
Liters.....	L	Metric Tons Per Day.....	S	Acres-foot.....	Q
Liters Per Hour.....	H	Pounds Per Hour.....	J	Hectares.....	F
Liters Per Day.....	V	Kilograms Per Hour.....	K	Hectare-meter.....	I
		Million Btu Per Hour.....	X	Btu Per Hour.....	I



## 10. Description of Hazardous Wastes (See instructions on page 25) - Enter information in the Sections on Form Page 5.

- A. EPA HAZARDOUS WASTE NUMBER** - Enter the four-digit number from 40 CFR, Part 261 Subpart D of each listed hazardous waste you will handle. For hazardous wastes which are not listed in 40 CFR, Part 261 Subpart D, enter the four-digit number(s) from 40 CFR Part 261, Subpart C that describes the characteristics and/or the toxic contaminants of those hazardous wastes.
- B. ESTIMATED ANNUAL QUANTITY** - For each listed waste entered in Section A, estimate the quantity of that waste that will be handled on an annual basis. For each characteristic or toxic contaminant entered in Section A, estimate the total annual quantity of all the non-listed waste(s) that will be handled which possess that characteristic or contaminant.
- C. UNIT OF MEASURE** - For each quantity entered in Section B, enter the unit of measure code. Units of measure which must be used and the appropriate codes are:

ENGLISH UNIT OF MEASURE	CODE	METRIC UNIT OF MEASURE	CODE
POUNDS	P	KILOGRAMS	K
TONS	T	METRIC TONS	M

If facility records use any other unit of measure for quantity, the units of measure must be converted into one of the required units of measure, taking into account the appropriate density or specific gravity of the waste.

**D. PROCESSES****1. PROCESS CODES:**

**For listed hazardous waste:** For each listed hazardous waste entered in Section A, select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the listed hazardous wastes.

**For non-listed hazardous waste:** For each characteristic or toxic contaminant entered in Section A, select the code(s) from the list of process codes contained in Items 8A and 9A on page 3 to indicate all the processes that will be used to store, treat, and/or dispose of all the non-listed hazardous wastes that possess that characteristic or toxic contaminant.

**NOTE: THREE SPACES ARE PROVIDED FOR ENTERING PROCESS CODES. IF MORE ARE NEEDED:**

- Enter the first two as described above.
- Enter "000" in the extreme right box of Item 10.D(1).
- Use additional sheet, enter line number from previous sheet, and enter additional code(s) in Item 10.E.

**2. PROCESS DESCRIPTION:** If a code is not listed for a process that will be used, describe the process in Item 10.D(2) or in Item 10.E(2).

**NOTE: HAZARDOUS WASTES DESCRIBED BY MORE THAN ONE EPA HAZARDOUS WASTE NUMBER** - Hazardous wastes that can be described by more than one EPA Hazardous Waste Number shall be described on the form as follows:

- Select one of the EPA Hazardous Waste Numbers and enter it in Section A. On the same line complete Sections B, C and D by estimating the total annual quantity of the waste and describing all the processes to be used to treat, store, and/or dispose of the waste.
- In Section A of the next line enter the other EPA Hazardous Waste Number that can be used to describe the waste. In Section D(2) on that line enter "Included with above" and make no other entries on that line.
- Repeat step 2 for each EPA Hazardous Waste Number that can be used to describe the hazardous waste.

**EXAMPLE FOR COMPLETING Item 10** (shown in line numbers X-1, X-2, X-3, and X-4 below) - A facility will treat and dispose of an estimated 900 pounds per year of chrome shavings from leather tanning and finishing operations. In addition, the facility will treat and dispose of three non-listed wastes. Two wastes are corrosive only and there will be an estimated 200 pounds per year of each waste. The other waste is corrosive and ignitable and there will be an estimated 100 pounds per year of that waste. Treatment will be in an incinerator and disposal will be in a landfill.

Line Number		A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES									
					(1) PROCESS CODES (Enter code)									
X	1	K 0 5 4	900	P	T	0	3	D	8	0				
X	2	D 0 0 2	400	P	T	0	3	D	8	0				
X	3	D 0 0 1	100	P	T	0	3	D	8	0				
X	4	D 0 0 2												Included With Above

## 10. Description of Hazardous Wastes (Continued. Use the Additional Sheet(s) as necessary; number pages as 5 a, etc.)

Line Number	A. EPA Hazardous Waste No. (Enter code)	B. Estimated Annual Quantity of Waste	C. Unit of Measure (Enter code)	D. PROCESSES										(2) PROCESS DESCRIPTION (If a code is not entered in D(1))
				(1) PROCESS CODES (Enter code)										
1	K 0 1 9	15,000	T	T	9	1	S	0	2					Onsite Reuse
2	D 0 1 9			T	9	1	S	0	2					included with line 1
3	D 0 2 2			T	9	1	S	0	2					included with line 1
4	D 0 2 8			T	9	1	S	0	2					included with line 1
5	D 0 3 2			T	9	1	S	0	2					included with line 1
6	D 0 3 3			T	9	1	S	0	2					included with line 1
7	D 0 3 4			T	9	1	S	0	2					included with line 1
8	D 0 3 9			T	9	1	S	0	2					included with line 1
9	D 0 4 0			T	9	1	S	0	2					included with line 1
10	D 0 4 3			T	9	1	S	0	2					included with line 1
11	F 0 2 4	100	T	T	9	1	S	0	2					Onsite Reuse/Offsite Disposal
12	D 0 1 3			T	9	1	S	0	2					included with line 11
13	D 0 2 2			T	9	1	S	0	2					included with line 11
14	D 0 2 8			T	9	1	S	0	2					included with line 11
15	D 0 3 2			T	9	1	S	0	2					included with line 11
16	D 0 3 3			T	9	1	S	0	2					included with line 11
17	D 0 3 4			T	9	1	S	0	2					included with line 11
18	D 0 3 9			T	9	1	S	0	2					included with line 11
19	D 0 4 0			T	9	1	S	0	2					included with line 11
20	D 0 4 3			T	9	1	S	0	2					included with line 11
21	K 0 2 2	15,000	T	S	0	2								Offsite Energy Recovery
22	D 0 0 1			S	0	2								included with line 21
23	D 0 0 7			S	0	2								included with line 21
24	D 0 2 6			S	0	2								included with line 21
25	D 0 0 1	2,000	T	S	0	2								Offsite Energy Recovery
26	D 0 1 8			S	0	2								included with line 25
27	K 0 2 2	900	T	S	0	2								Offsite Disposal
28	D 0 0 7			S	0	2								included with line 27
29														
30														
31														
32														
33														
34														
35														
36														
37														
38														
39														

EPA ID NO: 05717434

OMB #: 2050-0034 Expires 11/30/2005

10. Description of Hazardous Wastes (Continued. Use this Additional Sheet(s) as necessary; number as 5 a, etc.)

[illegible]



## 11. Map (See Instructions on pages 25 and 26)

Attach to this application a topographic map, or other equivalent map, of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in this map area. See instructions for precise requirements.

## 12. Facility Drawing (See Instructions on page 26)

All existing facilities must include a scale drawing of the facility (see instructions for more detail).

## 13. Photographs (See Instructions on page 26)

All existing facilities must include photographs (aerial or ground-level) that clearly delineate all existing structures; existing storage, treatment and disposal areas; and sites of future storage, treatment or disposal areas (see instructions for more detail).

## 14. Comments (See Instructions on page 26)

## Other Environmental Permits (continued from Section 6):

P-0205	Solid Waste Permit - Biosludge Pond
2907-V0	Title V Air Permit - Utilities/Wastewater Plant
1267-V0	Title V Air Permit - Phenol/Acetone Plant
2030-V0	Title V Air Permit - Chlorine/Caustic Plant
881-V2	Title V Air Permit - PVC Plant
2609-V1	Title V Air Permit - EDC/VCM Plant
2224-V1	Title V Air Permit - VCM Plant Incinerators
2056-V0	Title V Air Permit - Cogeneration Plant

## TABLE OF CONTENTS

I. PERMIT PREAMBLE .....	1
II. GENERAL PERMIT CONDITIONS.....	5
II.A. DURATION OF PERMIT .....	5
II.B. EFFECT OF PERMIT .....	5
II.C. PERMIT ACTIONS .....	5
II.D. SEVERABILITY .....	5
II.E. DUTIES AND REQUIREMENTS .....	6
III. GENERAL FACILITY CONDITIONS.....	17
III.A. DESIGN AND OPERATION OF ALL FACILITIES.....	17
III.B. REQUIRED NOTICE.....	17
III.C. GENERAL WASTE ANALYSIS.....	17
III.D. SECURITY .....	18
III.E. GENERAL INSPECTION REQUIREMENTS.....	18
III.F. PERSONNEL TRAINING .....	18
III.G. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE .....	18
III.H. LOCATION STANDARDS.....	18
III.I. PRECIPITATION RUN-ON AND RUN-OFF .....	19
III.J. HURRICANE EVENTS .....	19
III.K. PREPAREDNESS AND PREVENTION.....	19
III.L. CONTINGENCY PLAN.....	20
III.M. MANIFEST SYSTEM.....	20
III.N. RECORD KEEPING AND REPORTING .....	20
III.O. CLOSURE/POST-CLOSURE .....	21
III.P. POST-CLOSURE .....	22
III.Q. COST ESTIMATE FOR CLOSURE/POST-CLOSURE.....	22
III.R. FINANCIAL ASSURANCE FOR CLOSED UNITS.....	23
III.S. LIABILITY REQUIREMENTS.....	23
III.T. INCAPACITY OF THE PERMITTEE.....	23
III.U. POST-CLOSURE NOTICES .....	23
IV. PERMITTED FACILITIES .....	24
IV.A. TANKS .....	24
IV.B. COMBUSTION UNITS .....	24
V. PERMIT CONDITIONS APPLICABLE TO PERMITTED FACILITIES.....	25
VI. GROUNDWATER PROTECTION .....	53
VI.A. APPLICABILITY .....	53
VI.B. REQUIRED PROGRAMS .....	53
VI.C. CORRECTIVE ACTION .....	53

## TABLE OF CONTENTS

VII.A. STANDARD CONDITIONS .....	54
VII.B. EMISSION STANDARDS - PROCESS VENTS, EQUIPMENT LEAKS, TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (AA-BB AIR REGULATIONS) .....	58
VII.C. SPECIFIC CONDITION - CLOSURE .....	58
VIII. SPECIAL CONDITIONS PURSUANT TO HAZARDOUS AND SOLID WASTE AMENDMENTS—CORRECTIVE ACTION STRATEGY .....	59
VIII.A. ALTERNATE CORRECTIVE ACTION.....	59
VIII.B. PROJECT DEVELOPMENT AND SCOPING MEETING .....	64
VIII.C . REPORTING REQUIREMENTS.....	65
VIII.D. SPECIFIC CONDITION – CONCEPTUAL SITE MODEL (CSM) .....	66
VIII.E. INTERIM MEASURES .....	72
VIII.F. CAS (CORRECTIVE ACTION STRATEGY) INVESTIGATION WORKPLAN ..	73
VIII.G. IMPLEMENTATION OF SITE INVESTIGATION ACTIVITIES UNDER CAS ..	75
VIII.H. RECAP REPORT.....	75
VIII.I. REMEDIAL ALTERNATIVES STUDY.....	76
VIII.J. RISK MANAGEMENT PLAN.....	78
VIII.K. DETERMINATION OF NO FURTHER ACTION.....	80
VIII.L. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-IDENTIFIED SWMUs AND POTENTIAL AOCs .....	82
VIII.M. NOTIFICATION REQUIREMENTS FOR NEWLY-DISCOVERED RELEASES AT A SWMU OR AOC .....	83
VIII.N. PUBLIC PARTICIPATION REQUIREMENTS .....	84

## LIST OF ATTACHMENTS

ATTACHMENT 1.....LIST OF FACILITY DOCUMENTS  
INCORPORATED IN PERMIT BY REFERENCE

# **TABLE OF CONTENTS**

# **BODY OF PERMIT**

**DRAFT  
MODIFIED OPERATING PERMIT**

**Georgia Gulf Chemicals & Vinyls, LLC  
EPA ID# LAD057117434  
Agency Interest# 2455**

**Iberville Parish  
Plaquemine, Louisiana  
PER20070013  
Permit Number LAD057117434-OP-RN-1-MO-1**

**I. PERMIT PREAMBLE**

This permit is issued to Georgia Gulf Chemicals & Vinyls, LLC, hereinafter referred to as the Permittee, by the Louisiana Department of Environmental Quality (LDEQ) under authority of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et seq., and the regulations adopted thereunder.

For the purposes of the permit, "Administrative Authority" shall mean the Secretary of the Department of Environmental Quality, or his/her designee.

This permit is based on information submitted in the permit application, and all subsequent amendments, and on the applicant's certification that such information is accurate and that all facilities were or will be maintained and operated as specified in the application.

This permit is conditioned upon full compliance with all applicable provisions of the Louisiana Hazardous Waste Control Law, R.S. 30:2171 et. Seq., and the regulations adopted thereunder.

---

## GLOSSARY OF TERMS

For the purpose of this Permit, terms used herein shall have the same meaning as those in LAC 33:V.Subpart 1 unless the context of use in this Permit clearly indicates otherwise. Where terms are not otherwise defined, the meaning otherwise associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.

**“Administrative Authority”** means the Secretary of the Department of Environmental Quality or his designee or the appropriate assistant secretary or his designee.

**“Application”** refers to the RCRA Part B Permit Application and subsequent amendments submitted by the Permittee for obtaining a Permit.

**“Area of Concern” (AOC)** means any discernable unit or area, which, in the opinion of the Administrative Authority, may have received solid or hazardous waste or waste containing hazardous constituents at any time. The Administrative Authority may require investigation of the unit to determine if it is a Solid Waste Management Unit (SWMU). If shown to be a SWMU by the investigation, the AOC must be reported by the Permittee as a newly identified SWMU. If the AOC is shown not to be a SWMU by the investigation, the Administrative Authority may determine that no further action is necessary and notify the Permittee in writing.

**“Area of Investigation” (AOI)** is a zone contiguous to and including impacted media defined vertically and horizontally by the presence of one or more constituents in concentrations exceeding the limiting SS, MO-1 RS, or MO-2 RS (depending on the option being implemented).

**“Beneficial Resource”** describes a natural resource that is useful to human and ecological receptors. The state may establish statutes or regulations that identify certain environmental components, such as specific ground water or surface water sources, as a “Special Beneficial Resource,” or “Designated Beneficial Resource.” The beneficial resource then may be entitled to greater protection from contamination.

**“Constituents of Concern” (COC)** means the COPCs that pose a significant risk.

**“Constituents of Potential Concern” (COPC)** means chemicals from hazardous waste and hazardous waste constituents that are potentially site related and have data of quality for use in the Screen or a site-specific risk assessment. The facility should compile a list of COPCs for each release site based on existing sampling data, waste analysis reports, etc.

**“Conceptual Site Model” (CSM)** is part of the Data Quality Objective (DQO) process that presents a three-dimensional picture of site conditions at a discrete point in time that conveys what is known about the facility, releases, release mechanisms, contaminant fate and transport,

exposure pathways, potential receptors, and risks. The information for the CSM is documented into six profiles. The CSM evolves as data gaps in the profiles become more complete, and will be refined based upon results of site characterization data. The final CSM is documented in the Risk Management Plan (RMP).

**“CWA”** means Clean Water Act.

**“Corrective Action”** is an activity conducted to protect human health and the environment.

**“Department”** means the Louisiana Department of Environmental Quality.

**“Dense Nonaqueous Phase Liquid (DNAPL)”** a dense liquid not dissolved in water, commonly referred to as “free product.”

**“EPA”** means the United States Environmental Protection Agency.

**“Facility”** means, for the purpose of conducting corrective action under LAC 33:V.3322, all the contiguous property under the control of the Permittee.

**“HSWA”** means the 1984 Hazardous and Solid Waste Amendments to RCRA.

**“Hazardous Constituent”** means any constituent identified in LAC 33:V.Chapter 31, Table 1, or any constituent identified in LAC 33:V.3325, Table 4.

**“LDEQ”** means the Louisiana Department of Environmental Quality.

**“Light Nonaqueous Phase Liquid (LNAPL)”** a light liquid not dissolved in water, commonly referred to as “free product.”

---

**“Newly-discovered Release”** any release(s) of hazardous waste, including hazardous constituents, in which there is a statistically significant increase over the background data for the media of concern, during the course of groundwater monitoring, field investigation, environmental auditing, or by other means.

**“Operating Record”** means written or electronic records of all maintenance, monitoring, inspection, calibration, or performance testing—or other data as may be required—to demonstrate compliance with this Permit, document noncompliance with this Permit, or document actions taken to remedy noncompliance with this Permit. The minimum list of documents that must be included in the operating record is identified at LAC 33:V.1529.B.

**“Permittee”** means Georgia Gulf Chemicals and Vinyls, LLC, 26100 HWY 405 South, Plaquemine, Louisiana 70764.

**“RCRA Permit”** means the full permit, with RCRA and HSWA portions.

**“RFA”** means RCRA Facility Assessment.



**"RFI"** means RCRA Facility Investigation.

**"Release"** means any spilling, leaking, pouring, emitting, emptying, discharging, injecting, pumping, escaping, leaching, dumping or disposing of hazardous wastes (including hazardous constituents) into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing hazardous wastes or hazardous constituents).

**"SARA"** means Superfund Amendments and Reauthorization Action of 1986.

**"Solid Waste Management Unit" (SWMU)** means any discernable unit at which solid wastes have been placed at any time, irrespective of whether the unit was intended for the management of solid or hazardous waste. Such units include any area at a facility at which solid wastes have been routinely and systematically released.

**"Stabilization"** is an action taken for the purpose of controlling or abating threats to human health or the environment from releases or preventing or minimizing the further spread of contaminants while long-term remedies are pursued.

If, subsequent to the issuance of this Permit, regulations are promulgated which redefine any of the above terms, the Administrative Authority may, at its discretion, apply the new definition to this Permit.

All regulating citations are defined as being the regulations in effect on the date of issuance of this permit. New and/or amended regulations are not included as Permit requirements until permit modification procedures as specified in Condition II.C of the permit and LAC 33:V.321 are completed.

## **II. GENERAL PERMIT CONDITIONS**

### **II.A. DURATION OF PERMIT**

This permit is effective as of the date indicated on the accompanying signature page and shall remain in effect for a maximum period of ten (10) years from the effective date, unless suspended, modified, revoked and reissued or terminated for just cause.

### **II.B. EFFECT OF PERMIT**

This permit authorizes the Permittee to store and treat hazardous waste in accordance with the conditions of this permit. The Permittee is prohibited from any storage, treatment or disposal of hazardous waste not authorized by statute, regulation or this permit. Compliance with this permit, LAC 33:V.Subpart 1 and HSWA, constitutes compliance, for purposes of enforcement, with Subtitle C of RCRA and Chapter 9 of the Louisiana Environmental Quality Act (Act). However, compliance with the terms of this permit does not constitute a defense to any order issued or any action brought under Condition 3013 or Condition 7003 of RCRA, or under Condition 106 (a) of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) {42 U.S.C. 9606 (a)}.

In accordance with LAC 33:V.307.B and C, issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations.

### **II.C. PERMIT ACTIONS**

Any inaccuracies found in the permit application may be cause for revocation or modification of this permit. The Permittee must inform the Administrative Authority of any deviation from, changes or inaccuracies in the information in the permit application.

The Administrative Authority may also suspend, modify, revoke and reissue, or terminate for cause when necessary to be protective of human health or the environment as specified in 40 CFR 270.41, 270.42, 270.43 or LAC 33:V.309.F, 311.A or 323. The Administrative Authority may modify the permit when the standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. The filing of a request for permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of Permittee does not stay the applicability or enforceability of any permit condition.

### **II.D. SEVERABILITY**

The conditions of this permit are severable and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

## **II.E. DUTIES AND REQUIREMENTS**

### **II.E.1. Duty to Comply**

The Permittee shall comply with all conditions of this permit, except to the extent and for the duration such noncompliance may be authorized by an emergency permit, as described in LAC 33:V.701. Any permit noncompliance, other than noncompliance authorized by an emergency permit, constitutes a violation of the LAC 33:V.Subpart 1 and the Environmental Quality Act and is grounds for enforcement action which may include permit termination, permit revocation and reissuance, permit modification, or denial of permit renewal application.

### **II.E.2. Duty to Reapply**

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must reapply for the permit as required by the LAC 33:V.303.N and 309.B. Notification shall be at least 180 calendar days before the permit expires.

### **II.E.3. Permit Extension**

This permit and all conditions herein will remain in effect beyond the permit's expiration date until the Administrative Authority issues a final decision on the re-application, provided the Permittee has submitted a timely, complete new permit application as provided in LAC 33:V.309.B and 315.A.

### **II.E.4. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

### **II.E.5. Duty to Mitigate**

The Permittee shall immediately take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit as required by LAC 33:V.309.D.

### **II.E.6. Proper Operation and Maintenance**

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related ancillary equipment) that are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls,

including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

#### **II.E.7. Duty to Provide Information**

The Permittee shall furnish to the Administrative Authority, within a reasonable time, any information which the Administrative Authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Administrative Authority upon request, copies of records required by this permit and in accordance with LAC 33:V.309.H.

#### **II.E.8. Inspection and Entry**

The Permittee shall allow the Administrative Authority or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

**II.E.8.a.** enter upon the Permittee's premises where a regulated activity is located or conducted, or where records must be maintained under the conditions of this permit;

**II.E.8.b.** have access to and copy, at reasonable times, any records that must be maintained under the conditions of this permit;

**II.E.8.c.** inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operation regulated or required under this permit; and

**II.E.8.d.** sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Administrative Authority any substances or parameters at any location.

#### **II.E.9. Sample Monitoring and Records**

**II.E.9.a.** Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 CFR Part 261. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods, "SW-846", latest revision; Manual of Ground Water Quality Sampling Procedures, 1981, EPA-600/2-81-160, as revised; Procedures Manual for Ground Water Monitoring at Solid Waste Disposal Facilities, 1977, EPA-530/SW-611, as revised; or an equivalent method as specified in the attached Waste Analysis Plan referenced in Attachment 1.

**II.E.9.b. Records of monitoring information shall include:**

II.E.9.b.(1). the date, exact place, and time of sampling or measurements;

II.E.9.b.(2). the name(s) and signature(s) of the individual(s) who performed the sampling or measurements;

II.E.9.b.(3). the date(s) analyses were performed;

II.E.9.b.(4). the name(s) and signature(s) of the individual(s) who performed the analyses;

II.E.9.b.(5). the analytical techniques or methods used;

II.E.9.b.(6). the results of such analyses; and

II.E.9.b.(7). associated quality assurance performance data.

**II.E.9.c. Laboratory Quality Assurance/Quality Control**

In order to ensure the accuracy, precision, and reliability of data generated for use, the Permittee shall submit a statement, certified as specified in LAC 33:V.513 and included in the annual report, indicating that:

II.E.9.c.(1). any commercial laboratory providing analytical results and test data to the Department required by this permit is accredited by the Louisiana Environmental Laboratory Accreditation Program (LELAP) in accordance with LAC 33:I. Subpart 3, Chapter 45. Laboratory data generated by commercial laboratories not accredited under LELAP will not be accepted by the Department.

LAC 33:I.Subpart 3 (Chapters 45-49) provides requirements for the accreditation program. Regulations and a list of labs that have applied for accreditation are available on the LDEQ website located at: <http://www.deq.louisiana.gov/portal/tabid/2412/Default.aspx>.

In accordance with LAC 33:V.4501, the requirements for LELAP accreditation applies whenever data is:

- submitted on behalf of a facility;
- required as part of a permit application;
- required by order of the Department;
- required to be included in a monitoring report submitted to the Department;
- required to be submitted by contract; or
- otherwise required by Department regulations.

This includes, but is not limited to, data from RCRA Trial Burns, Risks Burns, Risk Assessments, MACT Comprehensive Performance Tests, and data used for continuing compliance demonstrations.

**II.E.9.c.(2).** If the Permittee decides to use its own in-house laboratory for test and analysis, the laboratory is not required to be accredited by LELAP. However, the laboratory must document and submit for approval, quality assurance/quality control procedures that are commensurate with requirements in LAC 33:I.Subpart 3, Laboratory Accreditation.

**II.E.9.c.(3).** For approval of equivalent testing or analytical methods, the Permittee may petition for a regulatory amendment under LAC 33:V.105.I and LAC 33:I.Chapter 9. In cases where an approved methodology for a parameter/analyte is not available or listed, a request to utilize an alternate method shall be submitted to the Administrative Authority for approval. Documentation must be submitted to the LDEQ that will verify that the results obtained from the alternate method are equal to or better than those obtained from EPA-accepted methods, as well as those deemed equivalent by the LDEQ.

#### **II.E.10. Retention of Records**

The Permittee shall maintain records through the active life of the facility (including operation, closure and post-closure periods) as required by LAC 33:V.309.J and LAC 33:V.1529.A, B, and C. All records, including plans, must be furnished upon request and made available at all reasonable times as required by LAC 33:V.1529.C. File copies shall be kept for LDEQ Inspection for a period of not less than three years as required by LAC 33:V.317.B.

The Permittee shall, for the life of the permit, maintain records of all data used to complete the application for this permit and any supplemental information submitted under the Louisiana Hazardous Waste Control Law (LA. R.S. 30:2171 et seq.).

#### **II.E.11. Notices of Planned Physical Facility Changes**

The Permittee shall give notice to the Administrative Authority, as soon as possible, of any planned physical alterations or additions to the permitted facility, in accordance with LAC 33:V.309.L.1.

#### **II.E.12. Physical Facility after Modification**

For any new or existing unit being modified, the Permittee may not manage hazardous waste in the modified portion of the unit until the unit is complete and:

**II.E.12.a.** the Permittee has submitted to and received approval from the Administrative Authority, by certified mail or hand delivery, a letter signed by the Permittee and an independent registered professional engineer stating that the unit is complete and has been constructed or modified in compliance with the permit; and

**II.E.12.b.** the Administrative Authority has inspected the modified unit following a request to make final inspection by the Permittee and finds it is in compliance with the conditions of the permit and all applicable sections of LAC 33:V.Subpart 1, and has issued an Order to Proceed. The Permittee may then commence treatment, storage, or disposal of hazardous waste.

#### **II.E.13. Anticipated Noncompliance**

The Permittee shall give advance notice to the Administrative Authority of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

#### **II.E.14. Transfer of Permits**

This permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to LAC 33:V.309.L.4, 321.B, 321.C.4, and 1531.D and E, as applicable.

#### **II.E.15. Compliance Schedules**

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date as required by LAC 33:V.309.L.6.

#### **II.E.16. Emergency Unauthorized Discharge Notification**

In accordance with LAC 33:I.3915, in the event of an unauthorized discharge that results in an emergency condition (an emergency condition is any condition which could be reasonably expected to endanger the health and safety of the public, cause significant adverse impact to the land, water, or air environment, or cause severe damage to property), the Permittee shall notify the DPS (Department of Public Safety) 24-hour Louisiana Emergency Hazardous Materials Hotline by telephone at (225) 925-6595 immediately, but in no case later than one (1) hour after learning of the discharge. The DPS 24-hour Louisiana Emergency Hazardous Materials Hotline will subsequently notify the Department regarding the details of the discharge.

#### **II.E.17. Non-Emergency Unauthorized Discharge Notification**

In accordance with LAC 33:I.3917, in the event of an unauthorized discharge that exceeds a reportable quantity specified in LAC 33:I.Chapter 39.Subchapter E and/or results in contamination of the groundwaters of the state but does not result in an emergency condition, the Permittee shall promptly notify the Department within twenty-four (24) hours after learning of the discharge. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, Single Point of Contact (SPOC) in accordance with the procedure and content requirements specified in LAC 33:I.3923.

#### **II.E.18. Unauthorized Discharge to Groundwater Notification**

In accordance with LAC 33:I.3919, in the event of an unauthorized discharge resulting in contamination of groundwaters of the state by moving in, into, within or on any saturated subsurface strata, the Permittee shall promptly notify the Department within twenty-four (24) hours after learning of the discharge. Notification shall be made to the Office of Environmental Compliance, Emergency and Radiological Services Division, SPOC in accordance with the procedure and content requirements specified in LAC 33:I.3923.

#### **II.E.19. Written Notification Reports for Unauthorized Discharges**

The Permittee shall submit written reports to the SPOC for any unauthorized discharges requiring notification under Condition II.E.16 through Condition II.E.18. The written report shall be submitted in accordance with the procedure and content requirements specified in LAC 33:I.3925.

#### **II.E.20. Noncompliance Reporting**

The Permittee shall report orally within twenty-four (24) hours any noncompliance with the permit not reported under Condition II.E.16 through Condition II.E.18 that may endanger the human health or the environment. This report shall include at minimum the following information:

**II.E.20.a.** information concerning the release of any hazardous waste that may endanger public drinking water supplies; and

**II.E.20.b.** information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, that could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

**II.E.20.b.(1).** name, address, and telephone number of the owner or operator;

**II.E.20.b.(2).** name, address, and telephone number of the facility;



**II.E.20.b.(3).** date, time, and type of incident;

**II.E.20.b.(4).** name and quantity of materials involved;

**II.E.20.b.(5).** the extent of injuries, if any;

**II.E.20.b.(6).** an assessment of actual or potential hazard to the environment and human health outside the facility, where this is applicable; and

**II.E.20.b.(7).** estimated quantity and disposition of recovered material that resulted from the incident.

#### **II.E.21. Follow-up Written Report of Noncompliance**

The Permittee shall provide a written submission within five (5) days after the time the Permittee becomes aware of any noncompliance which may endanger human health or the environment and reported under Condition II.E.20. The written submission shall contain a description of the noncompliance and its cause; the periods of noncompliance (including exact dates and times); whether the noncompliance has been corrected; and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. If the Administrative Authority waives the requirement, then the Permittee submits a written report within fifteen (15) days after the time the Permittee becomes aware of the circumstances, as required by LAC 33:V.309.L.7.

#### **II.E.22. Other Noncompliance**

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above, at the time required monitoring reports are submitted. The reports shall contain the information listed in Condition II.E.20.

#### **II.E.23. Other Information**

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or that it submitted incorrect information in a permit application, or in any report to the Administrative Authority, the Permittee shall promptly submit such facts or information.

#### **II.E.24. Signatory Requirement**

All applications, reports or other information submitted to the Administrative Authority shall be signed and certified according to LAC 33:V.507, 509, 511, and 513.

#### **II.E.25. Schedule of Compliance**

**II.E.25.a.** Within ninety (90) days of the effective date of the permit, the Permittee shall submit to the Administrative Authority updated secondary containment calculations for Tanks V-441A, V-441B and 01-47600.

**II.E.25.b.** Within ninety (90) days of the effective date of the permit, the Permittee shall submit to the Administrative Authority an updated version of Table 1 of the Waste Analysis Plan (WAP). Table 1 of the WAP must be updated to include specific sampling methods used, including the method variant (i.e., 6010B, 8270C). The updated Table 1 of the WAP must also reference the sampling point under "Sampling Method" using the P&ID valve number, if such is available.

#### **II.E.26. Additional Operating Standards**

(RESERVED)

#### **II.E.27. Updated Documents To Be Submitted Prior To Operation**

(RESERVED)

#### **II.E.28. Documents To Be Maintained at Facility Site**

**II.E.28.a.** The Permittee shall maintain at the facility, until closure is completed and certified by an independent registered professional engineer, the following documents and any amendments, revisions, and modifications to these documents. Any revision or changes shall be submitted with the annual report unless previously submitted.

**II.E.28.a.(1).** Waste Analysis Plan submitted in accordance with LAC 33:V.1519 and approved by the Administrative Authority (see Attachment 1).

**II.E.28.a.(2).** Personnel Training Plan and the training records as required by LAC 33:V.1515 (see Attachment 1).

**II.E.28.a.(3).** Contingency Plan submitted in accordance with LAC 33:V.1513 and approved by the Administrative Authority (see Attachment 1).

**II.E.28.a.(4).** Arrangements with local authorities in accordance with LAC 33:V.1511.G (see Attachment 1).

**II.E.28.a.(5).** Closure Plans submitted in accordance with LAC 33:V.3511 and approved by the Administrative Authority, as well as any post-closure care requirements that may be required initially or through permit modifications in accordance with LAC 33:V.3523 (see Attachment 1).

**II.E.28.a.(6).** Cost estimate for facility closure care submitted in accordance with LAC 33:V.3705 and approved by the Administrative Authority, as well as any post-closure cost estimate that may be required initially or through permit modifications in accordance with LAC 33:V.3709 (see Attachment 1).

**II.E.28.a.(7).** Operating records and Operations Plans referenced as required by LAC 33:V.1529, 1911.D, and 3007.K (see Attachment 1).

**II.E.28.a.(8).** Inspection Plan developed in accordance with LAC 33:V.517.G and 1509.B and approved by the Administrative Authority (see Attachment 1).

**II.E.28.a.(9).** Security Plan developed in accordance with LAC 33:V.1507 (see Attachment 1).

**II.E.28.b.** All proposed amendments, revisions and modifications to any plan or cost estimates required by this permit shall be submitted to the Administrative Authority for approval.

#### **II.E.29. Annual Report**

The Permittee shall submit an annual report covering all hazardous waste units and activities during the previous calendar year as required by LAC 33:V.1529.D.

#### **II.E.30. Manifest**

The Permittee shall report manifest discrepancies and un-manifested waste as required by LAC 33:V.309.L.8 and 9 and LAC 33:V.1107.

#### **II.E.31. Emissions**

Emissions from any hazardous waste facility shall not violate the Louisiana Air Quality Regulations. If air quality standards are exceeded, the site will follow air regulation protocol.

#### **II.E.32. Water Discharges**

Water discharges from any hazardous waste facility shall not violate the Louisiana Water Quality Regulations. If water standards are exceeded, the site will follow water quality regulation protocol.

#### **II.E.33. Non-Listed Hazardous Waste Facilities**

This permit is issued for those hazardous waste facilities listed in Condition IV (Permitted Facilities). If the Permittee determines that an un-permitted hazardous waste facility exists, the Permittee must immediately notify the Administrative Authority in accordance with Condition II.E.22 of the General Permit Conditions.

#### **II.E.34. Compliance With Land Disposal Restrictions**

The Permittee shall comply with those land disposal restrictions set forth in LA. R.S. 30:2193, all regulations promulgated thereunder, and the HSWA portion of this permit (Conditions VII and VIII).

#### **II.E.35. Establishing Permit Conditions**

Permits for facilities with pre-existing groundwater contamination are subject to all limits, conditions, remediation and corrective action programs designated under LAC 33:V.311.D and LAC 33:V.3303.

#### **II.E.36. Obligation for Corrective Action**

Owners or operators of hazardous waste management units must have all necessary permits during the active life of the unit and for any period necessary to comply with the corrective action requirements in Condition VIII. The facility is obligated to complete facility-wide corrective action regardless of the operational status of the facility.

#### **II.E.37. Attachments and Documents Incorporated by Reference**

All attachments and documents required by this permit, including all plans and schedules, are incorporated, upon approval by the Administrative Authority, into this permit by reference and become an enforceable part of this permit. When applicable, the Permittee must modify the permit according to LAC 33:V.Chapter 3. Since required items are essential elements of this permit, failure to submit any of the required items or submission of inadequate or insufficient information may subject the Permittee to enforcement action, which may include fines, suspension, or revocation of the permit. Also, where applicable, the Permittee must meet all the permit modification requirements contained in LAC 33:V.321, 322, and 323.

Any noncompliance with approved plans and schedules shall be termed noncompliance with this permit. Written requests for extension of due dates for submittals may be granted by the Administrative Authority.

If the Administrative Authority determines that actions beyond those provided for, or changes to what is stated herein, are warranted, the Administrative Authority may modify this permit according to procedures in LAC 33:V.321.

### **III. GENERAL FACILITY CONDITIONS**

#### **III.A. DESIGN AND OPERATION OF ALL FACILITIES**

**III.A.1.** The Permittee must maintain and operate all facilities to minimize the possibility of a fire, explosion, or any unauthorized sudden or non-sudden release of hazardous waste constituents to air, soil, or water that could threaten human health or the environment.

**III.A.2.** The Permittee shall not receive for treatment, storage, or disposal any hazardous waste generated outside the United States or its territories, in accordance with LA. R.S. 30:2189 of the Louisiana Environmental Quality Act.

**III.A.3.** No off-site generated hazardous wastes may be shipped to the Westlake facility (LAD 086478047) for storage, treatment, and/or disposal.

#### **III.B. REQUIRED NOTICE**

(RESERVED)

#### **III.C. GENERAL WASTE ANALYSIS**

The Permittee shall follow the procedures described in the Waste Analysis Plan referenced in Attachment 1 and in accordance with LAC 33:V.1519.

**III.C.1.** The Permittee shall review the Waste Analysis Plan annually and report to the Administrative Authority in the annual report whether any revision is required to stay abreast of changes in EPA methods and/or State regulatory provisions.

**III.C.2.** Annually, the Permittee shall submit a certified statement that indicates that any laboratory (i.e., on-site laboratory or contract laboratory) that provides chemical analyses, analytical results, or other test data to the department, by contract or by agreement, is accredited in accordance with the laboratory accreditation requirements of LAC 33:I.Chapter 45. This written statement shall be certified as specified in LAC 33:V.513 and included in the annual report. This documentation shall be resubmitted when a different laboratory is contracted for services.

**III.C.3.** If there is reason to believe that the hazardous waste has changed or the operation generating the hazardous waste has changed, the Permittee shall review and re-characterize all potentially impacted hazardous waste streams generated by the Permittee on-site and treated, stored, and/or disposed on-site. The Permittee must re-characterize wastes in accordance with LAC 33:V.1519.A.3. This re-characterization shall include laboratory analyses which provide information needed to properly treat, store, and dispose of the hazardous waste, including physical characteristics and chemical components of the waste. The results of this re-characterization shall be summarized in the Permittee's Annual Report.

**III.C.4.** In accordance with LAC 33:V.1519.B, the Waste Analysis Plan must meet all sampling and QA/QC protocols contained in Condition II.E.9.c. All test procedures used by the Permittee shall be maintained on file by the Permittee and made available to the LDEQ upon request.

### **III.D. SECURITY**

The Permittee must comply with the security provisions of LAC 33:V.1507, as referenced in Attachment 1.

### **III.E. GENERAL INSPECTION REQUIREMENTS**

The Permittee must follow the approved Inspection Plan referenced in Attachment 1. The Permittee must remedy any deterioration or malfunction discovered by an inspection as required by LAC 33:V.1509.C. Records of inspections must be kept as required by LAC 33:V.1509.D. The inspection schedule must include the regulatory requirements of LAC 33:V.517.G, 1509, 1911, and 3007.J.

### **III.F. PERSONNEL TRAINING**

The Permittee must conduct personnel training as required by LAC 33:V.1515.A, B, and C. The Permittee shall follow the approved Personnel Training Plan referenced in Attachment 1. The Permittee shall maintain all training documents and records as required by LAC 33:V.1515.D and E.

### **III.G. GENERAL REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTE**

The Permittee must take precautions as required by LAC 33:V.1517 to prevent accidental ignition or reaction of ignitable or reactive wastes. The Permittee shall store ignitable, reactive, or incompatible wastes only in accordance with LAC 33:V.1517, 1917, 1919.

### **III.H. LOCATION STANDARDS**

**III.H.1.** The Permittee has furnished that it is in compliance with seismic standards as required by LAC 33:V.517.T.

**III.H.2.** The Permittee must not manage any hazardous waste on any portion of the property that lies within the 100 year flood plain (as identified in the Flood Insurance Rating Map) unless such areas are raised above this flood level or other means (e.g., levees) are provided to protect such areas from washouts, overtopping by wave action, soil erosion or other effects of such a flood as required by LAC 33:V.1503.B.3. Such site improvements must be certified by independent licensed professional engineers and approved by the Administrative Authority prior to any hazardous waste and/or hazardous waste units being placed thereon.

### **III.I. PRECIPITATION RUN-ON AND RUN-OFF**

The Permittee must provide for the control by diversion and/or containment of run-on and run-off resulting from a rainfall occurring during a period of twenty-four (24) hours as defined by local rainfall records and LAC 33:V.1503.B.2. The Permittee shall comply with the requirements of LAC 33:V.1907.E.1.b.

### **III.J. HURRICANE EVENTS**

The Permittee must initiate those applicable portions of the Contingency Plan during a hurricane as well as appropriate actions required by LAC 33:V.1507, 1509 and 1511.

### **III.K. PREPAREDNESS AND PREVENTION**

#### **III.K.1. Required Equipment**

At a minimum, the Permittee must install and maintain the equipment set forth in the Contingency Plan, as required by LAC 33:V.1511.C.

#### **III.K.2. Testing and Maintenance of Equipment**

The Permittee must test and maintain the equipment specified in Condition III.K.1 to insure its proper operation in time of emergency. The testing and maintenance of the equipment must be documented in the operating record.

#### **III.K.3. Access to Communications or Alarm Systems**

The Permittee must maintain access to the communications or alarm system as required by LAC 33:V.1511.E.1 and 1511.E.2.

#### **III.K.4. Required Aisle Space**

In no case shall aisle space be less than two (2) feet. In addition, the Permittee shall maintain adequate aisle space as required by LAC 33:V.1511.F.

#### **III.K.5. Arrangements with Local Authorities**

The Permittee shall document in the annual report that the requirements of LAC 33:V.1511.G have been met. This documentation shall include those state and local agencies involved and those facilities and operations covered. Documentation of written arrangements with state and local agencies shall also be included in this report. Where state or local authorities decline to enter into such arrangements, the Permittee must document the refusal in the operating record.



### **III.L. CONTINGENCY PLAN**

#### **III.L.1. Implementation of Plan**

The Permittee must immediately carry out the provisions of the approved Contingency Plan referenced in Attachment 1, and follow the emergency procedures described by LAC 33:V.1513.F whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents that threaten or could threaten human health or the environment.

#### **III.L.2. Copies of Plan**

The Permittee must comply with the requirements of LAC 33:V.1513.C.

#### **III.L.3. Amendments to Plan**

The Permittee must review and immediately amend, if necessary, the Contingency Plan as required by LAC 33:V.1513.D.

#### **III.L.4. Emergency Coordinator**

The Permittee must comply with the requirements of LAC 33:V.1513.E concerning the emergency coordinator.

### **III.M. MANIFEST SYSTEM**

The Permittee shall comply with the manifest requirements of LAC 33:V.Chapter 11.

### **III.N. RECORDKEEPING AND REPORTING**

#### **III.N.1. Operating Record**

The Permittee shall maintain a written operating record at the facility in accordance with LAC 33:V.1529.A, B, and C and the approved Operations Plan referenced in Attachment 1.

#### **III.N.2. Annual Report**

The Permittee must comply with the annual report requirements of LAC 33:V.1529.D.

#### **III.N.3. Operations Manual**

The Permittee shall compile and keep current an operations manual covering all aspects of the Permittee's storage facilities.

### **III.O. CLOSURE/POST-CLOSURE**

The Permittee shall address the following regulatory citations in the closure plan: LAC 33:V.1915, 3503, 3505, 3507, 3509, 3511, 3513, and 3515. The Administrative Authority may re-evaluate the adequacy of the approved closure plan and/or the confirmatory sampling procedures prior to the commencement of closure (e.g., permit renewal applications, permit modifications, notifications of intent to close).

#### **III.O.1. Closure Performance Standard**

The Permittee shall close the facility in accordance with the approved Closure Plan referenced in Attachment 1 and in accordance with the applicable sections of LAC 33:V.3507.

#### **III.O.2. Amendment to Closure Plan**

The Permittee shall amend the Closure Plan where necessary, in accordance with LAC 33:V.3511.C. Any modification shall be subject to LAC 33:V.321, 322 and 323, where applicable.

#### **III.O.3. Notification of Closure**

The Permittee shall notify the Administrative Authority at least forty-five (45) days prior to the date it expects to begin closure in accordance with LAC 33:V.3511.D.

#### **III.O.4. Time Allowed For Closure**

After receiving the final volume of hazardous waste, the Permittee shall treat or remove from the site all hazardous waste in accordance with the schedule specified in the closure plan referenced in Attachment 1 and in accordance with LAC 33:V.3513.

#### **III.O.5. Disposal or Decontamination of Equipment**

The Permittee shall decontaminate and dispose all facility equipment in accordance with the approved Closure Plan referenced in Attachment 1 and in accordance with LAC 33:V.3515.

#### **III.O.6. Certification of Closure**

The Permittee shall certify that the facility has been closed in accordance with the specifications in the approved Closure Plan as required by LAC 33:V.3517.

#### **III.O.7. Inventory at Closure**

The Permittee shall be responsible for closure cost based upon the maximum permitted facility inventories listed below in Tables 1 and 2.

**TABLE 1**  
**(8) Existing Hazardous Waste Tanks**

TANKS	SERVICE	WASTE	MAXIMUM PERMITTED CAPACITY (GALLONS)
TK-623A	EDC Heavy Ends Storage Tank	K019	250,000
TK-629	EDC Heavy Ends Storage Tank	K019	300,800
01-47507	Waste Oils	D001, D018, D028, D043	82,500
02-47519	Phenol Heavy Oils and Light Oils	K022	68,200
02-47520	Phenol Heavy Oils and Light Oils	K022	68,200
V-441A	VCM Light Ends	F025, K019	23,500
V-441B	EDC Reactor Bottoms	F024	23,500
01-47600	Nebraska Boiler Wash Water	K022	10,000

**TABLE 2**  
**(1) Existing Combustion Unit**

COMBUSTION UNIT	LOCATION	SERVICE
Industrial Furnace (IN-662)	EDC/VCM Plant	Liquid Hazardous Waste

### **III.P. POST-CLOSURE**

The Permittee must attempt to clean close all hazardous waste units. If the facility cannot be clean closed, the Permittee shall submit a post-closure plan for approval by the Administrative Authority. If some waste residues or contaminated materials are left in place at final closure, the Permittee must comply with all post-closure requirements contained in LAC 33:V.3519-3527, including maintenance and monitoring throughout the post-closure care period.

### **III.Q. COST ESTIMATE FOR CLOSURE/POST-CLOSURE**

**III.Q.1.** The Permittee must maintain cost estimates for closure of facilities in accordance with LAC 33:V.3705 and 3707.

**III.Q.2.** The Permittee shall maintain and adjust the closure cost estimate for inflation, as specified in LAC 33:3705.B, 3705.C, and for other circumstances that increase the cost of closure.

**III.Q.3.** The Permittee must adjust the closure cost estimate within thirty (30) days after approval by the Administrative Authority of any request to modify the closure plan in accordance with LAC 33:V.3705.C. The Permittee shall consider the impact of any inventory and/or process changes on the closure cost estimate.

**III.Q.4.** The closure cost estimate must equal the cost of closure at the point in the facility's operating life when the extent and manner of its operation would make closure most expensive and must be based on costs to the Permittee of hiring a third party to execute all closure activities. The closure cost estimate shall be based on the maximum permitted inventory of each facility as specified in Condition III, Tables 1 and 2.

**III.Q.5.** If the Permittee is unable to complete clean closure of all facilities specified in Condition III, Tables 1 and 2 as per LAC 33:V.Chapter 35 and as acceptable by the Administrative Authority, a Post-Closure Plan must be submitted for each facility failing to achieve clean closure within ninety (90) days from the date that the Permittee or Administrative Authority determines that the unit must be closed as a landfill. The Post-Closure Plan must meet the requirements of LAC 33:V.3523.B.

### **III.R. FINANCIAL ASSURANCE FOR CLOSED UNITS**

The Permittee shall establish and maintain financial assurance for closure in accordance with LAC 33:V.3707 for all units listed under Condition III.O.7.

### **III.S. LIABILITY REQUIREMENTS**

The Permittee shall have and maintain liability coverage for sudden accidental occurrences in the amounts of \$1,000,000 each occurrence and \$2,000,000 annual aggregate, exclusive of legal defense costs, as required by LAC 33:V.3715.A. The Permittee shall have and maintain liability coverage for non-sudden accidental occurrences in the amounts of \$3,000,000 each occurrence and \$6,000,000 annual aggregate, exclusive of legal defense costs, as specified in LAC 33:V.3715.B.

### **III.T. INCAPACITY OF THE PERMITTEE**

The Permittee must comply with LAC 33:V.3717 whenever bankruptcy is initiated for the Permittee or its institutions providing financial assurance. If insurance is used for compliance with LAC 33:V.3715, the Permittee must immediately notify the Administrative Authority if the insurance company is placed in receivership. The Permittee must establish other financial assurance or liability coverage within sixty (60) days after such an event.

### **III.U. POST-CLOSURE NOTICES**

(RESERVED)

#### IV. PERMITTED FACILITIES

##### IV.A. TANKS

Details of the existing tanks listed in Table 3, including design and operational specifications are contained in Condition V.A.

**TABLE 3**  
**(8) Existing Hazardous Waste Tanks**

TANKS	SERVICE	WASTE	MAXIMUM PERMITTED CAPACITY (GALLONS)
TK-623A	EDC Heavy Ends Storage Tank	K019	250,000
TK-629	EDC Heavy Ends Storage Tank	K019	300,800
01-47507	Waste Oils	D001, D018, D028, D043	82,500
02-47519	Phenol Heavy Oils and Light Oils	K022	68,200
02-47520	Phenol Heavy Oils and Light Oils	K022	68,200
V-441A	VCM Light Ends	F025, K019	23,500
V-441B	EDC Reactor Bottoms	F024	23,500
01-47600	Nebraska Boiler Wash Water	K022	10,000

##### IV.B. COMBUSTION UNIT

Details of the existing combustion unit listed in Table 4, including design and operational specifications, are contained in Permit Conditions V.B through V.D.

**TABLE 4**  
**(1) Existing Combustion Unit**

COMBUSTION UNIT	SERVICE	LOCATION
Industrial Furnace	Liquid Hazardous Waste	EDC/VCM Plant

## **V. PERMIT CONDITIONS APPLICABLE TO PERMITTED FACILITIES**

### **V.A. TANKS**

#### **V.A.1. Description of Tank Systems**

##### **V.A.1.a. Operation**

**V.A.1.a.(1).** All permitted tanks and associated piping, pumps, instruments, containments, and vent controls shall be operated and maintained in accordance with LAC 33:V.Chapter 19 and the specification and design criteria provided in the Permit Application.

**V.A.1.a.(2).** The Permittee shall operate and maintain all permitted tanks and containment systems according to the specifications, design criteria, and design limits specified in Table 5.

**V.A.1.a.(3).** The design temperature and pressure for each tank listed in Table 5, shall not change unless a permit modification is requested by the Permittee and subsequently approved by the Administrative Authority.

##### **V.A.1.b. Permitted Tanks**

**V.A.1.b.(1).** The tanks listed in Table 5 are permitted for hazardous waste storage. These tanks have been certified by an independent, professional engineer licensed in the State of Louisiana and have sufficient structural integrity for the storage of hazardous waste.

**V.A.1.b.(2).** The tanks listed in Table 5 must be clearly marked with the words "Hazardous Waste" in accordance with LAC 33:V.1104.E.1.d.

**V.A.1.b.(3).** The Permittee is prohibited from storing or treating hazardous waste in any tank storage system not listed in Table 5 for greater than ninety (90) days, unless an extension is granted by the Administrative Authority in accordance with LAC 33:V.1109.E.2.

**V.A.1.b.(4).** The Permittee is prohibited from receiving any hazardous waste from off-site.

##### **V.A.1.c. Proposed Tanks**

(RESERVED)

**TABLE 5 DESIGN AND OPERATING PARAMETERS FOR RCRA TANK SYSTEMS**

Tank No.	Year Put Into Service	Service	Materials of Construction	Dimensions and Permitted Capacity	Design Standard	Inspection Standard	Design Temp. and Pressure	Nominal Built Thickness	Minimum Thickness	Secondary Containment Capacity
TK-623A 08-47558	2007	K019	ASME SA-36 Carbon Steel	250,000 gal 36.5'(D)X32'(H) Conical bottom	API 650	API 653	150°F +4 to -2 in of water	3/8" Course 1 1/2" Course 2 1/2" bottom	0.1875" sides 0.125 " bottom	282,611 gal (Shared with TK-629)
TK-629 08-47569	1979	K019	ASME A-283-C Carbon Steel	300,800 gal 40'(D)X32'(H)	API 650	API 653	150°F +4 to -2 in of water	.3696" Course 1 .290" Course 2 .250" Courses 3 and 4 .250" roof .3125" bottom	0.1875" sides 0.100 " bottom	314,309 gal (Shared with TK-623A)
01-47507	1979	D001, D018, D028, D043	ASME A-283-C Carbon Steel	82,500 gal 21'3"(D)X32'(H)	API 650	API 653	250°F +11 to -0.865 in of water	0.300" wall 1.0" bottom	0.1875" sides 0.100 " bottom	194,520 gal
02-47519	1979	K022	ASME A-283-C Carbon Steel	68,200 gal 22'(D)X24'(H) Cone roof	API 650	API 653	250°F +11 to -0.865 in of water	0.3125" wall and roof 0.375" bottom	0.1875" sides 0.100 " bottom	148,736 gal (Shared with 47520 and 47536)
02-47520	1979	K022	ASME A-283-C Carbon Steel	68,200 gal 22'(D)X24'(H) Cone roof	API 650	API 653	250°F +11 to -0.865 in of water	0.3125" wall and roof 0.375" bottom	0.1875" sides 0.100 " bottom	148,736 gal (Shared with 47519 and 47536)
02-47536	1979	D001	ASME A-283-C Carbon Steel	8,800 gal 10'(D)X15'(H) Cone roof	API 650	API 653	250°F +11 to -0.865 in of water	0.250" wall and bottom	0.1875" sides 0.100 " bottom	97,666 gal (Shared with 47519 and 47520)
V-441A 08-42836	1979	F025	ASME SA-515, GR70Carbon Steel	23,500 gal 12'(D)X24'(L)	ASME Sec. VIII Div. I	API 510	250° F 108 PSI G	0.640" wall 0.760" head	0.523" head 0.525" shell	40,504 gal (shared with V-441B)
V-441B 08-42837	1979	F024	ASME SA-515, GR70Carbon Steel	23,500 gal 12'(D)X24'(L)	ASME Sec. VIII Div. I	API 510	250° F 108 PSI G	0.640" wall 0.760" head	0.523" head 0.525" shell	40,504 gal (shared with V-441A)
01-47600	1996	K022	ASME A-36 Carbon Steel	10,000 gal 12'(D)X14'(H)	API 650	API 653	150° F 6 PSI (2 oz. Vacuum in Water)	0.250" wall 0.3125" roof 0.375" floor	0.119"	14,653 gal

## **V.A.2. Permitted and Prohibited Wastes**

### **V.A.2.a. Permitted Waste**

Subject to the terms of this permit, the Permittee is allowed to store in the tanks as described in Condition V.A.1.b, and the hazardous wastes identified in the most current RCRA Subtitle C Site Identification Form (Part A Permit Application).

### **V.A.2.b. Prohibited Waste**

The Permittee is prohibited from storing hazardous waste that is not identified in the most current RCRA Subtitle C Site Identification Form (Part A Permit Application).

## **V.A.3. Secondary Containment**

### **V.A.3.a. Duty to Comply with LAC 33:V.1907.B through F**

The Permittee shall design, construct, operate, and maintain the secondary containment system in accordance with LAC 33:V.1907.B through F and Table 5 of this permit.

### **V.A.3.b. Prevention of Migration**

**V.A.3.b.(1).** Secondary containment systems must be maintained and operated to prevent any migration of wastes or accumulated liquid out of the system to the soil, groundwater, or surface water at any time during the use of the tank system in accordance with LAC 33:V.1907.B.1.

**V.A.3.b.(2).** Ancillary equipment must be provided with secondary containment, except as excluded by LAC 33:V.1907.F.

**V.A.3.b.(3).** Secondary containment systems must be free of cracks or gaps and other surface defects that would allow liquid to migrate out of the containment system in accordance with LAC 33:V.1907.E.

**V.A.3.b.(4).** Spilled or leaked waste and/or accumulated precipitation must be removed from the secondary containment system within twenty-four (24) hours in accordance with LAC 33:V.1907.C.4.

**V.A.3.b.(5).** If unable to remove spilled or leaked waste and/or accumulated precipitation within twenty-four (24) hours, the Permittee must demonstrate to the Administrative Authority that more time is required and propose an alternate schedule for removal.



### **V.A.3.c. Requirements for Facilities Requesting a Variance**

(RESERVED)

## **V.A.4. OPERATING REQUIREMENTS**

### **V.A.4.a. Duty to Comply with LAC 33:V.1909.A**

The Permittee shall comply with LAC 33:V.1909.A. Hazardous wastes or treatment reagents must not be placed in a tank system if they could cause the tank, its ancillary equipment, or the containment system to rupture, leak, corrode, or otherwise fail.

### **V.A.4.b. Duty to Comply with LAC 33:V.1909.B**

The Permittee shall comply with LAC 33:V.1909.B and Table 5 of this permit. The Permittee must use appropriate controls and practices to prevent spills and overflows from tanks and containment systems.

### **V.A.4.c. Tank Covers**

All hazardous waste storage tanks shall be covered and shall not be vented directly to the atmosphere if the tanks are used to store, or if a possibility exists that they may be used to store, volatile or malodorous waste.

### **V.A.4.d. Maintenance**

The Permittee shall maintain the permitted tank systems according to the design code specified for each tank as listed in Table 5 and not exceed the listed operating conditions.

## **V.A.5. Ignitable, Reactive, and Incompatible Wastes**

The Permittee shall store ignitable, reactive, or incompatible wastes only in accordance with LAC 33:V.1517.B, 1917 and 1919.

## **V.A.6. Inspections**

### **V.A.6.a. Inspection Schedule**

The Permittee shall comply with LAC 33:V.1911.A through C by following the inspection schedule submitted in the Inspection Plan (see Attachment 1).

#### **V.A.6.b. Daily Inspection**

**V.A.6.b.(1).** At least once per day while the tank is operating in hazardous waste service, the Permittee shall inspect the following:

**V.A.6.b.(1).a.** Aboveground portions of the tank system, including the tank, ancillary piping, valves, and vent controls, to detect corrosion, cracks or releases of waste.

**V.A.6.b.(1).b.** Data gathered from monitoring and leak detection equipment.

**V.A.6.b.(1).c.** The construction materials and area immediately surrounding the externally accessible portion of the tank system and ancillary equipment, e.g. secondary containment system, to detect erosion, cracks and signs of hazardous waste releases.

**V.A.6.b.(2).** All deficiencies noted during daily inspections must be recorded and remedied in a timely manner.

#### **V.A.6.c. External Inspection**

At a minimum, external inspection of each tank covered by this permit shall be performed as often as required by the API designated inspection standard in Table 5. The required frequency of inspection with reference to the applicable section of the standard shall be kept on site and available for review by the Administrative Authority upon request. The inspection shall be performed by a person meeting the minimum qualifications required under the inspection standard in Table 5. The inspection checklist shall be comparable to that in API Standard 510 or 653 as applicable.

If the result of such an inspection reveals that the tank is unfit for continued service, the Permittee shall immediately stop the flow of hazardous waste into the tank and comply with LAC 33:V.1913. The certification required by LAC 33:V.1913.F shall be obtained before the tank is put back into service.

#### **V.A.6.d. Internal Inspection**

Internal inspection of each tank covered by this permit shall be performed as often as required by the inspection standard in Table 5. The required frequency of inspection with reference to the applicable section of the standard shall be kept on site and available for review by the Administrative Authority upon request. The inspection shall be performed by a person meeting the minimum qualifications required under the inspection standard in Table 5. The inspection checklist shall be comparable to that in API Standard 510 or 653 as applicable.

If the result of such an inspection reveals that the tank is unfit for continued service, the Permittee shall immediately stop the flow of hazardous waste into the tank and comply with LAC 33:V.1913. The certification required by LAC 33:V.1913.F shall be obtained before the tank is put back into service.

#### **V.A.6.e. Thickness Testing**

**V.A.6.e.(1)** The Permittee shall conduct:

**V.A.6.e.(1)(a)** external inspections by an authorized inspector of each tank referenced in Table 5 at least every two (2) years according to the API standard specified in Table 5; and

**V.A.6.e.(1)(b)** internal inspections by an authorized inspector of each tank referenced in Table 5 at least every ~~five (5)~~ ten (10) years according to the API standard specified in Table 5. The inspection shall include thickness testing to demonstrate compliance with Condition V.A.6.e.(4). The ~~five (5)~~ ten (10) year clock shall restart upon the completion of each internal inspection.

**V.A.6.e.(2)** Tank thickness measurements shall be taken on the tank top and shell and shall be taken at least on each tank quadrant during the external inspections required under Condition V.A.6.e.(1)(a). Tank thickness measurements shall be taken on the bottom of the tank during the internal inspections required under Condition V.A.6.e.(1)(b). Tank thickness readings shall be taken in the same place during each testing event in order to form a comparison of readings for corrosion rate determination.

**V.A.6.e.(3).** Thickness testing of the tank bottom shall be performed as often as the internal inspection, or more often if required by the inspection standard specified in Table 5. The required frequency of inspection with reference to the applicable section of the inspection standard shall be kept on-site and made available to the Administrative Authority upon request.

**V.A.6.e.(4).** Tank thickness readings shall also be taken at any spot where visual corrosion or compromised integrity is evident.

**V.A.6.e.(5).** When any tank shell thickness measurement at a single point is less than that required in Table 5, the Permittee shall immediately comply with either Condition V.A.6.e.(5).a or b below. Condition V.A.6.e.(5).b shall not be used for any tank where the shell thickness measurement is less than 0.100 inches.

**V.A.6.e.(5).a.** When a tank is deemed unfit for use, the Permittee shall immediately stop the flow of hazardous waste into the tank and comply with LAC 33:V.1913. The tank shall be repaired or replaced and the certification required by LAC 33:V.1913.F shall be obtained before the tank is put back into service.

**V.A.6.e.(5).b.** An engineering evaluation shall be performed, conforming to the appropriate standard or standards, as allowed by the design or inspection standard in Table 5. If the evaluation determines that the tank is unfit for service, the Permittee shall comply with Condition V.A.6.e.(5).a immediately. The evaluation must be submitted to the Waste Permits Division for approval within forty-five (45) days of the initial measurement.

**V.A.6.e.(6).** Tank thickness measurements shall not be averaged, unless allowed under the tank inspection standard in Table 5. Averaging of tank thickness measurements shall be brought to the attention of the Administrative Authority.

**V.A.6.f. Overfill Controls**

Overfill controls shall be tested to ensure that they are in working order according to the schedule proposed in the Inspection Plan (see Attachment 1).

**V.A.6.g. Fiberglass Tanks**

(RESERVED)

**V.A.7. Response to Leaks and Spills**

**V.A.7.a. Duty to Comply with LAC 33:V.1913.A through E**

In the event of a leak or spill from a tank system, secondary containment system, or if a system becomes unfit for use, the Permittee shall comply with LAC 33:V.1913.A through E.

#### **V.A.7.b. Leaks and Spills**

**V.A.7.b.(1).** Upon discovering a leak or spill, the Permittee must immediately stop the flow of hazardous waste into the tank system or secondary containment system and inspect the system to determine the cause of the release.

**V.A.7.b.(2).** Within twenty-four (24) hours of detecting a leak from the tank system, or in as timely a manner as is practical if the Permittee demonstrates that it is not possible to remove the waste within twenty-four (24) hours, the Permittee must remove as much waste as necessary to prevent further release from the tank or secondary containment system and to allow inspection and repair of the tank system in accordance with LAC 33:V.1913.B.1.

**V.A.7.b.(3).** Any spilled material or material trapped in sumps that is a hazardous waste or that will be disposed of as a hazardous waste must be cleaned up in a timely manner, as required by LAC 33:V.1505.C.3.

**V.A.7.b.(3).a.** If the collected material is discharged through a point source to United States waters or to a Publicly Owned Treatment Works, it is subject to the requirements of the Clean Water Act.

**V.A.7.b.(3).b.** If the collected material is released to the environment, it may be subject to reporting under applicable requirements of LAC 33:V.1505, LAC 33:I.Chapter 39, and 40 CFR Part 302.

**V.A.7.b.(4).** When a leak or spill occurs, the Permittee shall remove and properly dispose of any visible contamination of the soil or surface water in accordance with LAC 33:V.1913.C.2.

**V.A.7.b.(5).** A tank system from which a leak or spill has occurred must be closed in accordance with the approved Closure Plan and LAC 33:V.1915, unless the requirements of LAC 33:V.1913.E.2-3 are satisfied.

**V.A.7.b.(5).a.** For a release caused by a spill that has not damaged the integrity of the system, the Permittee shall remove the released waste and make any necessary repairs to fully restore the integrity of the system before returning the tank system to service in accordance with LAC 33:V.1913.E.2.

**V.A.7.b.(5).b.** For a release caused by a leak from the primary tank system to the secondary containment system, the Permittee shall repair the primary system prior to returning the tank to service in accordance with LAC 33:V.1913.E.3.

**V.A.7.b.(6).** If the Permittee replaces a component of the tank system to eliminate a leak, that component must satisfy the requirements for new tank systems or components in LAC 33:V.1905 and 1907.

**V.A.7.b.(7).** All leaks and spills shall be documented in the daily inspection log.

#### **V.A.7.c. Major Repairs**

**V.A.7.c.(1).** The Permittee shall comply with LAC 33:V.1913.F when performing major repairs to a tank system.

**V.A.7.c.(2).** Major repairs shall include, but not be limited to, installation of an internal liner, repair of a ruptured tank, repair of a ruptured secondary containment area, and removal of a tank from its foundation for any reason.

**V.A.7.c.(3).** The Permittee shall conform to the appropriate portion of the most recent inspection code listed in Table 5 for maintenance, inspection, re-rating, repair, and alteration of all tanks.

**V.A.7.c.(4).** The tank shall not be returned to service unless the Permittee has obtained a certification by an independent professional engineer licensed in the State of Louisiana that the system is capable of handling hazardous waste without release for the intended life of the system. The certification of repairs shall include an inspection in accordance with the requirements of any applicable codes, such as API 510 or API 653. The certification shall be submitted to the Administrative Authority within seven (7) days of returning the tank system to use in accordance with LAC 33:V.1913.F.

#### **V.A.8. Air Emission Control Equipment Standards**

(RESERVED)

**Note:** In order to prevent redundant regulation, Condition V.A.8 has been reserved. The Permittee will comply with the provisions of Condition V.A.8 by complying with the provisions of its Comprehensive Fugitive Emissions Monitoring Program implemented under the facility air permit. Failure by the Permittee to comply with those provisions that are equivalent to the provisions in LAC 33:V.Chapter 17 will also result in a failure to comply with LAC 33:V.Chapter 17.

## **V.A.9. Recordkeeping**

### **V.A.9.a. New Tanks**

In the event any new tank systems are installed, the Permittee shall obtain, and keep on file at the facility, the written statements by those persons required to certify the design and installation of new tank systems, in accordance with LAC 33:V.1905.G.

### **V.A.9.b. Written Assessment**

The Permittee shall keep on file at the facility, written assessments of the tank systems' integrity. The assessments shall be updated at the time of submittal of a Permit Renewal Application and/or at any other time deemed necessary by the Administrative Authority (i.e., permit modifications, tank replacements, tank repairs, etc.).

### **V.A.9.c. Inspections**

**V.A.9.c.(1).** The Permittee shall document in the operating record for the facility inspection of those items in Condition V.A.6.a and b.

**V.A.9.c.(1).a.** The daily log sheets shall include all monitored parameters for the prevention of spills and overflows, including temperature, pressures, and levels.

**V.A.9.c.(1).b.** The Permittee shall note all deficiencies discovered during the inspection in the inspection log.

**V.A.9.c.(1).c.** Corrective action taken in response to deficiencies must be included as part of the operating record for the facility.

**V.A.9.c.(2).** The Permittee shall document in the operating record all tests and inspections of overfilling controls.

**V.A.9.c.(3).** The Permittee shall keep on file at the facility the results of the internal and external inspections required by Condition V.A.6.c and d. The Permittee shall note all deficiencies discovered during the inspection in the inspection log. Corrective action taken in response to deficiencies must be included as part of the operating record for the facility.

**V.A.9.c.(4).** The Permittee shall keep on file at the facility all information related to tank thickness testing required under Condition V.A.6.e.

**V.A.9.c.(4).a.** This information shall include at a minimum the date(s) of assessment, the location where measurement readings are taken, the raw measurement data, comparison of actual reading to minimum thickness requirements, the corrosion rate, and calculation of remaining tank life.

**V.A.9.c.(4).b.** If an engineering evaluation is performed in accordance with Condition V.A.6.e.(5).b, the results of such an evaluation shall be kept in the operating record. The engineering evaluation must include, at minimum, details on how the evaluation was performed, references to applicable tank codes, raw data, calculations performed, and an explanation of why the tank is or is not fit for continued service.

**V.A.9.c.(4).c.** Any tank thickness measurements that are averaged under Condition V.A.6.e.(5) must be supported by documentation with references to the applicable tank codes. The documentation shall include all raw measurement data, calculations, and results of averaging. This information shall be kept as a part of the operating record for the facility.

**V.A.9.c.(5).** The Permittee shall keep on file at the facility the records of repairs required under Condition V.A.7.c.

#### **V.A.9.d. Releases**

**V.A.9.d.(1).** The Permittee shall keep on file at the facility notification reports submitted under LAC 33:V.1913.D.

**V.A.9.d.(2).** Within twenty-four (24) hours of detecting a reportable leak or spill from a tank system or secondary containment system to the environment, the Permittee shall report the leak in accordance with either Condition II.E.16 (Emergency Unauthorized Discharge) or Condition II.E.17 (Non-Emergency Unauthorized Discharge).

**V.A.9.d.(3).** As required by LAC 33:V.1913.D.3, within thirty (30) days of detecting a reportable release to the environment from a tank system or secondary containment system, the Permittee shall report the following information to the Administrative Authority's Single Point of Contact (SPOC):

**V.A.9.d.(3).a.** Likely route of migration of the release,

**V.A.9.d.(3).b.** Characteristics of the surrounding soil, including soil composition, geology, hydrogeology, and climate,



**V.A.9.d.(3).c.** Results of any monitoring or sampling conducted in connection with the release (if available). If the Permittee finds it will be impossible to meet this time schedule, the Permittee must provide the Administrative Authority with a schedule of when the results will be available. This schedule must be provided before the required thirty (30) day submittal period expires,

**V.A.9.d.(3).d.** Proximity of downgradient drinking water, surface water, and populated areas, and

**V.A.9.d.(3).e.** A description of response actions taken or planned.

**V.A.9.e. Repairs**

The Permittee shall keep on file at the facility all certifications required by Condition V.A.7.c.

**V.A.10. Closure and Post-Closure Care**

**V.A.10.a. Duty to Comply with LAC 33:V.1915.A**

The Permittee shall comply with LAC 33:V.1915.A by following the procedures specified in the approved Closure Plan, see Attachment 1.

**V.A.10.b. Duty to Comply with LAC 33:V.1915.B**

If the Permittee demonstrates that not all contaminated soils can be practicably removed or decontaminated in accordance with Condition V.A.10.a, the Permittee shall comply with LAC 33:V.1915.B.

**V.A.10.c. Post-Closure**

The Permittee shall attempt to clean close all tank systems. If the surface and subsurface soils below and adjacent to the tank system cannot be clean closed and the Permittee has not demonstrated through a risk assessment approved by the Administrative Authority that closure with the remaining contaminant levels is protective of human health and the environment, the Permittee shall present a post-closure plan to the Administrative Authority for approval. If any waste residue or contaminated media are left in place at final closure, the Permittee must comply with all post-closure requirements contained in LAC 33:V.3519 through 3527, including maintenance and monitoring throughout the post-closure care period.

## **V.B. GENERAL REQUIREMENTS FOR THE INDUSTRIAL FURNACE**

### **V.B.1. Inspections**

#### **V.B.1.a. Requirements**

**V.B.1.a.(1).** The Permittee shall inspect the industrial furnace and instrumentation in accordance with Table 6 of this permit.

**V.B.1.a.(2).** The industrial furnace and associated equipment (pumps, valves, pipes, fuel storage tanks, and other ancillary equipment) will be subject to a daily thorough, visual inspection, when they contain hazardous waste. The purpose of these inspections will be to identify leaks, spills, fugitive emissions, and signs of tampering. The automatic waste feed cut off system and associated alarms must be tested at least monthly when hazardous waste is burned to verify operability, unless the applicant demonstrates to the Administrative Authority that weekly inspections will unduly restrict or upset operations and that less frequent inspections are adequate. Support for this demonstration shall be included in the operational record. At a minimum, operational testing of the automatic waste feed cut off system must be conducted at least monthly, (LAC 33:V.3005 F.3 and F.4).

#### **V.B.1.b. Records**

**V.B.1.b.(1).** Written inspection records shall be part of the operating record for this permit and are hence subject to LAC 33:V.1529 requirements. At a minimum, the record shall include the following information: (1) the date and time of the inspection, (2) inspector's name, (3) any inspection observations, and (4) date and nature of corrective action. The inspection record shall be completed in accordance with LAC 33:V.1509 and shall be available at all times to the Administrative Authority.

Electronic records may be maintained, in lieu of paper copies.

**V.B.1.b.(2).** A written record of the automatic waste feed cut-off system tests shall be part of the operating record for this permit and shall be available at all times to the Administrative Authority.

Electronic records may be maintained, in lieu of paper copies.

### **V.B.2. Monitoring and Calibration**

#### **V.B.2.a. Requirements**

**V.B.2.a.(1).** The Permittee shall maintain, calibrate, and operate continuous monitors that monitor and record the operating conditions specified in Conditions V.C of this permit. The continuous monitoring requirements shall be as specified in Table 9 of this permit. (LAC 33:V.3005.F)

**V.B.2.a.(2).** The Administrative Authority may request data be submitted in any format or units that facilitates the completion of air modeling, risk assessment, or compliance procedures.

**V.B.2.a.(3).** Monitoring samples and measurements shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed shall be the appropriate method specified in LAC 33:V. Chapter 49. Appendix D or an equivalent method approved by the Administrative Authority.

Other sampling and analytical methods shall be those specified in *Test Methods for Evaluating Solid Waste: Physical/Chemical Methods*, SW-846, as revised; *Standard Methods for the Examination of Water and Wastewater*, current edition, or equivalent methods.

**V.B.2.a.(4).** The Permittee must calibrate the equipment specified in Table 9 according to the manufacturer's specifications. Calibration procedures shall be included in the operating record of the facility and available at all times for review by the Administrative Authority.

**V.B.2.a.(5).** Hazardous waste may continue to be introduced into the industrial furnace during daily continuous emission monitoring system (CEMS) calibration check periods. The CEMS shall be maintained according to the following schedule: (1) at least daily, a calibration check of the instrument; (2) at least daily, a system audit; (3) at least quarterly, a calibration error test; and (4) at least annually, a performance specification test. The procedures for CEMS maintenance are outlined in 40 CFR 266 Appendix IX Condition 2.0, "Performance Specifications for Continuous Emission Monitoring Systems."

#### **V.B.2.b. Records**

In the operating record, the Permittee shall record and maintain in accordance with LAC 33:V.1529 all monitoring data compiled to satisfy the permit requirements. Minimum monitoring requirements are summarized in LAC 33:V.3005.F. In accordance with LAC 33:V.3005.F.2, all continuous monitors shall record data in units corresponding to the permit limit unless otherwise specified in the permit.

Electronic records may be maintained, in lieu of paper copies.

### **V.B.3. Performance Standards**

#### **V.B.3.a. Requirements**

The Permittee shall comply with the performance standards specified in this Permit when hazardous waste is burned in the industrial furnace (LAC 33:V.3009-3015).

**V.B.3.a.(1).** The industrial furnace shall achieve a Destruction and Removal Efficiency (DRE) of 99.99 percent for each principal organic hazardous constituent (POHC). The DRE shall be determined by using the method specified in LAC 33:V.3009.A.

**V.B.3.a.(2).** The Permittee shall control hydrogen chloride (HCl) emissions such that the rate of emission from the stack is no greater than that specified in LAC 33:V.3015.

**V.B.3.a.(3).** The emissions of particulate matter shall not exceed 0.08 grains per dry standard cubic foot of stack gas, corrected to 7 percent oxygen by volume, in accordance with the formula specified in LAC 33:V.3011.

**V.B.3.a.(4).** The emissions of carbon monoxide, corrected to 7 percent oxygen, shall not exceed 100 parts per million by volume on an hourly rolling average in accordance with LAC 33:V.3009.B.

#### **V.B.3.b. Records**

The Permittee shall record in the facility operating record all occasions on which waste is fed to the industrial furnace and when the operating limits specified in this permit are exceeded.

Electronic records may be maintained, in lieu of paper copies.

### **V.B.4 Automatic Waste Feed Cut Off**

#### **V.B.4.a. Requirements**

**V.B.4.a.(1).** The Permittee shall operate the systems specified in Table 7 of this permit to automatically cut off the hazardous waste feed when the monitored operating conditions deviate from the set points specified in the permit.

**V.B.4.a.(2).** Operating parameters for which permit limits are established must continue to be monitored following the cut off, and the hazardous waste feed shall not be restarted until the levels of those parameters that caused the automatic waste feed cut off are restored to permit limits. All other parameters must also be within permit limits.

**V.B.4.a.(3).** In the event of a malfunction of the automatic waste feed cut off system, the Permittee shall immediately cut off and/or lock out the waste feed.

#### **V.B.4.b. Records**

**V.B.4.b.(1).** The Permittee shall record in the facility operating record the date and time of all automatic waste feed cut off events. The records shall also include the known or suspected cause of the automatic waste feed cut off, the

triggering parameters, the corrective actions taken, the duration of the event, and the date and time of restarting waste feed following the automatic waste feed cut off.

Electronic records may be maintained, in lieu of paper copies.

**V.B.4.b.(2).** The Permittee shall record in the facility operating record all failures of the automatic waste feed cut off system, including the date and time of the failure, a description of the failure, root cause of the failure, and corrective actions taken.

**V.B.4.b.(3).** The operating record shall be maintained in an organized manner for a period of not less than 3 years and be available at all times for inspection by the Administrative Authority (LAC 33:V.3005.H).

#### **V.B.5. Reports**

The date, cause, and remedial action for each waste feed cut off activation shall be documented in the operating record. A summary of such occurrences must be included in the annual report. The Permittee shall report in writing to the Administrative Authority if there are more than fifty (50) permit required waste feed cut offs per month. This report shall include cause and remedial actions taken.

#### **V.B.6. Regulation of Residues**

The Permittee shall regulate all hazardous waste combustion residues in accordance with LAC 33:V.3025.

## **V.C. SPECIFIC OPERATING CONDITIONS FOR THE INDUSTRIAL FURNACE (IN-662)**

The industrial furnace shall be subject to the following provisions and operating conditions until such time the Permittee conducts a Comprehensive Performance Test (CPT) in accordance with the Hazardous Waste Combustors Maximum Achievable Control Technology (HWC-MACT) timelines and requirements. After the Administrative Authority issues a Finding of Compliance on the results of the initial CPT, this permit will be modified and the provisions and operating conditions pertaining to the normal operation of the industrial furnace will be transferred to the Permittee's Title V Air Permit.

### **V.C.1. Permitted and Prohibited Wastes**

**V.C.1.a.** The Permittee may only burn hazardous wastes with EPA waste codes listed in the current RCRA Subtitle C Site Identification Form (Part A Permit Application) except as prohibited in Condition V.C.1.b.

**V.C.1.b.** The burning of the following waste is prohibited:

**V.C.1.b.(1).** Dioxin-containing wastes identified by EPA as F020, F021, F022, F023, F026, F027, and F028 wastes in LAC 33:V.4901.

**V.C.1.b.(2).** Polychlorinated biphenyl (PCB) waste, as defined in 40 CFR Part 761.3.

**V.C.1.b.(3).** Source material, special nuclear material, mixed waste, or naturally occurring radioactive materials (NORM) that is not exempt pursuant to LAC 33:XV.

**V.C.1.b.(4).** Explosive material, as defined by the Department of Transportation under 49 CFR Part 173.

**V.C.1.b.(5).** Municipal Waste.

**V.C.1.b.(6).** Containerized Gases.

**V.C.1.b.(7).** Medical/Infectious wastes as defined in 40 CFR 60.51.c.

**V.C.1.b.(8).** Metal bearing wastes listed in LAC 33:V.Chapter 22.Table 14, except as described in LAC 33:V.2207.C.

**V.C.1.b.(9).** Wastes displaying the characteristic of reactivity as defined in LAC 33:V.4903.D.

**V.C.1.c.** Before burning any wastes not authorized under this permit, the Permittee shall obtain approval for a permit modification, as required under LAC 33:V.321.

## **V.C.2. Process Operating Conditions**

The unit must be operated within the conditions prescribed below at all times while hazardous waste is in the unit. (LAC 33:V.3005.E.1 and LAC 33:V.3005.E.2.c)

### **V.C.2.a. Group A Parameter Limits**

The Permittee shall operate the industrial furnace with a functioning system to automatically cut off waste feed to the combustion unit when operating conditions deviate from those established below.

**V.C.2.a.(1)** Whenever hazardous waste is in the unit, the hourly rolling average of the combustion chamber temperature in the Oxidizer shall be maintained above the minimum value of 2227°F.

**V.C.2.a.(2)** Whenever hazardous waste is in the unit, the hourly rolling average ~~ID-fan-flue-gas~~ combustion air flow rate shall be maintained below a maximum of ~~17,500 dry standard cubic feet per minute~~ 53,000 Mlbs/hr.

**V.C.2.a.(3)** Whenever hazardous waste is in the unit, the hourly rolling average waste feed rate to the industrial furnace shall be maintained below the maximum value of 10.5 gallons per minute.

**V.C.2.a.(4)** Whenever hazardous waste is in the industrial furnace, the unit must be kept totally sealed to protect against the escape of fugitive emissions. In accordance with LAC 33:V.3005.E.7, the Permittee must monitor the outside of the combustion unit for signs of fugitives at least daily or document a continuous negative pressure in the combustion chamber.

**V.C.2.a.(5)** Whenever hazardous waste is in the unit, the hourly rolling average carbon monoxide (CO) level shall be maintained below the maximum value of 100 parts per million volume, continuously corrected to seven (7) percent oxygen, dry gas basis in accordance with LAC 33:V.3009.B-C.

**V.C.2.a.(6)** Whenever hazardous waste is in the unit, the hourly rolling average scrubber pH shall be maintained above the minimum value of 8.5.

**V.C.2.a.(7)** Whenever hazardous waste is in the unit, the hourly rolling average scrubber liquid flow rate shall be maintained above the minimum of 300 gallons per minute.

### **V.C.2.b. Group B Parameter Limits**

The Permittee shall operate the industrial furnace without exceeding these limits, although these limits are not part of the automatic waste feed cut off set points.

**V.C.2.b.(1)** The hourly rolling average total ash feed rate shall be no greater than 11.5 pounds per hour.

**V.C.2.b.(2)** The combined total chloride and chlorine feed rate from all feedstreams shall be no greater than 5,177 pounds per hour, hourly rolling average (Tier III).

**V.C.2.b.(3)** O<sub>2</sub> shall be monitored continuously whenever hazardous waste is in the industrial furnace, in accordance with CEMS regulations. O<sub>2</sub> level is provided as a correction factor, and as such, no limit is provided under this condition.

**V.C.2.b.(4)** The instantaneous atomizing fluid pressure shall be maintained above the minimum of 40 psig.

**V.C.2.b.(5)** The hourly rolling average metal feed rates from all feedstreams to the industrial furnace's combustion chamber shall not exceed the following limits.

Antimony (Tier I) ~~600~~ 1,100 g/hr

\*Arsenic (Tier I) ~~4.6~~ 11 g/hr

Barium (Tier I) ~~100,000~~ 250,000 g/hr

\*Beryllium (Tier I) ~~8.6~~ 21 g/hr

\*Cadmium (Tier I) ~~11~~ 28 g/hr

\*Chromium (Tier III) ~~1.7~~ 4.2 g/hr

Lead (Tier I) ~~180~~ 460 g/hr

Mercury (Tier I) ~~600~~ 1,500 g/hr

Silver (Tier I) ~~6,000~~ 15,000 g/hr

Thallium (Tier I) ~~600~~ 1,500 g/hr



\*The feed rate of arsenic, beryllium, cadmium, and chromium is limited to a level such that the sum of the ratios of the actual feed rate to the feed rate limit specified in Condition V.C.2.b.(5) shall not exceed 1.0, as provided by the following equation:

$$\sum_{i=1}^n \text{AFR}_{(i)} / \text{FRL}_{(i)} \leq 1.0$$

$\text{AFR}_{(i)}$  = **Actual Feed Rate (AFR)**  
The actual feed rate of carcinogenic metal (i) introduced into the combustion chamber from all industrial furnace feedstreams.

$n$  = Number of Carcinogenic Metals.

$\text{FRL}_{(i)}$  = **Feed Rate Limit (FRL)**  
The regulatory feed limit of carcinogenic metal (i) listed in V.C.2.b.(5)

#### **V.C.2.c. Group C Parameter Limits**

The Permittee shall operate the industrial furnace without exceeding these limits, although these limits are not part of the automatic waste feed cut off set points.

**V.C.2.c.(1)** Whenever hazardous waste is in the unit, the Permittee shall maintain the waste feed in a flowable form.

**V.C.2.c.(2)** The hourly rolling average total heat input to the industrial furnace from all feed streams shall not exceed 35,340,000 British Thermal Units (BTUs) per hour.

**V.C.2.c.(3)** The Permittee shall immediately stop the flow of hazardous waste into the combustion unit should sample flow to the Continuous Emissions Monitoring System (CEMS) cease, outside of normal calibration periods.

**V.C.2.c.(4)** At a minimum, the Permittee shall analyze values from the Continuous Emissions Monitoring System (CEMS) every 15 seconds. The Permittee must record these values every 60 seconds to demonstrate compliance with the monitoring requirements in accordance with 40 CFR 266 Appendix IX Condition 2.1.2.1.

**V.C.2.c.(5)** For a Continuous Process Monitoring System (CPMS) operated to ensure compliance with these regulations, the Permittee must maintain and operate the monitors consistent with the manufacturer's specifications.

**V.C.2.c.(6)** At a minimum, the Permittee shall analyze values from the Continuous Process Monitoring System (CPMS) every 15 seconds. The Permittee must record these values every 60 seconds to demonstrate compliance with the monitoring requirements.

**TABLE 6  
INUDSTRAIL FURNACE INSPECTIONS**

<b>EQUIPMENT/INSTRUMENT</b>	<b>INSPECTION ELEMENTS</b>	<b>INSPECTION FREQUENCY</b>
Burner System	Leak in manifold	Daily
Waste Feed System	Atomizing Fluid Pressure Transducer	Daily
	Waste Feed Pressure Transducer	Daily
	Waste Feed Flowmeter	Daily
Waste Tank System	Tank Integrity	Daily
	Level Controls (Operability)	Monthly
	Overflow Alarms and Controls (Operability)	Monthly
	Secondary Containment	Daily
Industrial Furnace	Fugitive Emissions	Daily
	Refractory	Every Turnaround
Continuous Process Monitors	Out-of-Tolerance Operational Data	Daily
Automatic Waste Feed Cut Off (AWFCO) System	Operability	Monthly

**TABLE 7**  
**GROUP A PARAMETER LIMITS FOR THE INDUSTRIAL FURNACE**  
**(AUTOMATIC WASTE FEED CUT OFFS)**

CONTROL PARAMETER	FINAL OPERATING LIMITS AUTOMATIC WASTE FEED CUT OFF POINT
Maximum Hazardous Waste Feed Rate	10.5 gpm, hourly rolling average
Minimum Combustion Chamber Temperature	2,227 ° F
Minimum Scrubber Liquid Flow Rate	300 gpm
Minimum Scrubber pH	8.5
Maximum <del>Feed Draft Fan</del> Combustion Air Flow Rate <sup>1</sup>	<del>17,500 DSCFM</del> 53,000 Mlbs/hr
Maximum Stack Gas Carbon Monoxide	100 ppmv, corrected to 7% oxygen of a dry gas basis, hourly rolling average

<sup>1</sup> Combustion air flow rate serves as a surrogate measurement of the stack flow rate for the industrial furnace. During the June 1998 industrial furnace trial burn, a combustion air flow rate of 53,000 Mlbs/hr (as measured by flow meter FC 5495) was correlated to a stack flow rate of 14,939.60 DSCFM (as measured by direct stack sampling utilizing EPA Method 2). See Table 2.4.1 Summary of Stack Gas Characteristics, Page 2-5 of the June 1998 Industrial Furnace DRE Trial Burn Report.

**TABLE 8**  
**GROUP B & C PARAMETER LIMITS FOR THE INDUSTRIAL FURNACE**

CONTROL PARAMETER	FINAL OPERATING LIMITS
Minimum atomizing fluid pressure	40 psig, instantaneous
Maximum ash feed rate	11.5 lb/hr, hourly rolling average
Maximum total chlorine and HCl feed rate (Tier III)	5,177 pounds/hr, hourly rolling average
Maximum heat input from all streams	35,340,000 Btu/hr, hourly rolling average
Maximum feed rate of Antimony (Tier I) <sup>1</sup>	600 1,100 g/hr, hourly rolling average
*Maximum feed rate of Arsenic (Tier I) <sup>1</sup>	4.6 11 g/hr, hourly rolling average
Maximum feed rate of Barium (Adjusted Tier I) <sup>1</sup>	100,000 250,000 g/hr, hourly rolling average
*Maximum feed rate of Beryllium (Tier I) <sup>1</sup>	8.6 21 g/hr, hourly rolling average
*Maximum feed rate of Cadmium (Tier I) <sup>1</sup>	11 28 g/hr, hourly rolling average
*Maximum feed rate of Chromium (Tier III) <sup>1</sup>	1.7 4.2 g/hr, hourly rolling average
Maximum feed rate of Lead (Tier I) <sup>1</sup>	180 460 g/hr, hourly rolling average
Maximum feed rate of Mercury (Tier I) <sup>1</sup>	600 1,500 g/hr, hourly rolling average
Maximum feed rate of Silver (Tier I) <sup>1</sup>	6000 15,000 g/hr, hourly rolling average
Maximum feed rate of Thallium (Tier I) <sup>1</sup>	600 1,500 g/hr, hourly rolling average

<sup>1</sup> Compliance with the short term limits presented in Table 8 does not necessarily ensure compliance with the long term five (5) year cumulative, risk-based limits presented in Table 10. The Permittee must operate the industrial furnace in a manner which complies with the limits presented in both Table 8 and Table 10.

**TABLE 9**  
**INSTRUMENTATION TO BE CALIBRATED TO MANUFACTURER'S SPECIFICATIONS**

<b>CONTROL PARAMETER</b>	<b>INSTRUMENT DESCRIPTION</b>	<b>LOCATION</b>	<b>CALIBRATION FREQUENCY</b>
Hazardous Waste Feed Rate	Mass Flow Meter	In feed line, upstream from the waste burner	Every 1.5 years
Forced Draft Fan Flow Rate	Differential, Diaphragm- Type Transducer, Air Foil	Forced draft fan outlet	Every 1.5 years
Stack Gas Oxygen	Paramagnetic	Extracted sample from the exhaust stack	Daily calibration check, calibrate per 40 CFR 266 Appendix IX specifications
Stack Gas Carbon Monoxide	Infrared Cell	Extracted sample from the exhaust stack	Daily calibration check, calibrate per 40 CFR 266 Appendix IX specifications
Atomizing Fluid Pressure	Pressure Switch	In atomizing stream	Every 1.5 years
Steam Production Rate	Differential, Diaphragm- Type Transducer, Orifice	In steam header	Every 1.5 years

## **V.D. RISK-BASED CONDITIONS**

### **V.D.1. Definitions:**

**V.D.1.a. Annual Sampling Mode:** A rate of sampling once per twelve (12) months, but no closer than 200 days or longer than 530 days since the last sampling.

**V.D.1.b. Quarterly Sampling Mode:** A rate of sampling once per every three (3) months, but no closer than forty (40) days or longer than 140 days since the last sampling.

**V.D.1.c. Monthly Sampling Mode:** A rate of sampling once every month, but no closer than ten (10) days or longer than fifty (50) days since the last sampling.

**V.D.1.d. Analytical Database:** A record of analytical results from all hazardous waste feed metal samples taken, voluntarily or required. This database contains all data obtained whether used in calculating a five (5) year rolling total metals feed rate or not.

**V.D.1.e. Five (5) Year Rolling Total Metals Feed:** A time-weighted calculation of total mass of a metal fed to the industrial furnace based upon analysis results obtained during the previous sixty months. Invalidated data shall not be used in calculating this total. The time weighting of data will be from the date of sampling that generates valid data to the next sampling date when valid data is obtained. This value is a monthly rolling total.

**V.D.1.f. Five (5) Metals Feed Guideline:** A site-specific, risk-based guideline based upon an EPA Risk Assessment and plant operations during the Risk Assessment Burn. The guideline value is calculated using EPA's grams per second mass flow rate results from the risk assessment and projecting that flow over sixty (60) months, including one (1) leap day.

**V.D.2.** For each permitted hazardous waste the Permittee shall conduct total metals sampling and analysis for antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, nickel, selenium, silver and thallium.

**V.D.2.a.** The Permittee shall sample each waste feed stream to the industrial furnace four (4) times annually (referred to as quarterly sampling mode), unless the provisions of Conditions V.D.7 or V.D.8 below apply.

**V.D.2.b.** LDEQ/EPA-approved sampling and analytical methods (e.g., "Test Methods for Evaluating Solid Waste – Physical/Chemical Methods", SW-846) shall be used unless the Permittee obtains approval from the LDEQ to use another method.

**V.D.3.** The site-specific, risk-based guidelines are based upon the EPA Risk Assessment conducted for this facility. EPA recommended these guidelines as annual average values since the risk assessment evaluated risk over a forty (40) year operating time period. In

determining the metal mass flow rate for each hazardous waste to compare to the site-specific, risk-based guideline for that metal, the Permittee shall calculate a five (5) year rolling total metals feed to the industrial furnace from the valid data in the analytical database.

**V.D.4.** The Permittee shall not exceed:

**V.D.4.a.** The five (5) metals feed guideline specified in Table 10 when calculating the total metals feed for any metal over the previous twelve (12) months; and

**V.D.4.b.** After five (5) years from the effective date of this permit, the five (5) metals feed guideline in Table 10 when calculating the five (5) year rolling total metals feed for any metal over the previous sixty (60) months (an exceedance of Condition D.4.a above shall not constitute an exceedance of this Condition).

**V.D.5.** During the initial five (5) year period (which begins on the effective date of this permit) the Permittee may use existing historical data to calculate the five (5) year rolling total metals feed, if that data exists.

**V.D.5.a.** Combustion units with limited historical data, less than five (5) consecutive years of annual sampling and analysis data shall develop historical data at an accelerated rate by either option listed as follows:

**V.D.5.a.(1)** Sample at the monthly sampling mode for one (1) year; or

**V.D.5.a.(2)** Sample at the quarterly sampling mode for five (5) quarters.

**V.D.5.b.** After completion of the accelerated sampling frequency to develop a historical record, the Permittee may initiate the quarterly or annual sampling mode, as determined by the Permittee's projected five (5) year compliance with the risk-based guidelines in Table 10 and as described in Condition V.D.7 and Condition V.D.9 below.

**V.D.6.** When the five (5) year rolling total metals feed rate for a metal being sampled under the annual sampling mode exceeds the five (5) year metals feed guideline listed in Table 10 for that metal during a sampling and analysis event, the Permittee shall increase the sampling frequency for that metal to the quarterly sampling mode.

**V.D.7.** When the five (5) year rolling total metals feed rate for a metal being sampled under the quarterly sampling mode does not exceed the five (5) year metals feed guideline listed in Table 10 for the last five (5) sampling events for that metal, the Permittee may reduce the sampling frequency for that metal to the annual sampling mode.

**V.D.8.** When the five (5) year rolling total metals feed rate for a metal being sampled under the quarterly sampling mode exceeds the five (5) year metals feed guideline listed in Table 10 for that metal during any two (2) of five (5) consecutive sampling and analysis events, the Permittee shall:

**V.D.8.a.** increase the sampling frequency for that metal in the hazardous waste stream to the monthly sampling mode;

**V.D.8.b.** investigate the cause of the high metal mass flow rate;

**V.D.8.c.** determine probable causes for exceeding the site-specific, risk-based guideline for that metal;

**V.D.8.d.** take corrective measures to demonstrate compliance with the risk-based guidelines for that metal; and

**V.D.8.e.** notify LDEQ in the annual report referenced in Condition II.E.29 of the exceedance, probable causes of the exceedance and corrective measures taken.

**V.D.9.** When the five (5) year rolling total metals feed rate for a metal being sampled under the monthly sampling mode does not exceed the five (5) year metals feed guideline listed in Table 10 for the last five (5) sampling events for that metal, the Permittee may reduce the sampling frequency for that metal to the quarterly sampling mode.

**V.D.10. Data Handling**

**V.D.10.a.** At any time, the Permittee may voluntarily increase the sampling frequency of a metal in a hazardous waste stream.

**V.D.10.a.(1)** When sampling under a voluntarily-increased frequency, the Permittee may return at any time to the sampling mode for which the metal in the hazardous waste stream was qualified.

**V.D.10.a.(2)** Sampling and analysis results obtained during the voluntarily-increased sampling frequency shall not be used to increase or reduce the sampling mode.

**V.D.10.a.(3)** Data obtained during the voluntarily-increased frequency shall be included in the analytical database and used in calculating the five (5) year rolling total metals feed.

**V.D.10.b.** The Permittee may request that the laboratory immediately re-analyze the sample (replicate analysis) for a metal when data is suspect.

**V.D.10.b.(1)** All analysis data obtained shall be included in the analytical database.

**V.D.10.b.(2)** Any data that is considered invalid shall have an explanation defining what basis was used to invalidate the data.

**V.D.10.b.(3)** Data that is proven to be invalid shall not be used in calculating the five (5) year rolling total metals feed.

**V.D.10.b.(4)** Replicate sample results may be used as the sampling frequency results when the original sample results have been invalidated.

**V.D.10.c.** The Permittee may resample the hazardous waste stream and have the sample analyzed for the subject metal when data is suspect.

**V.D.10.c.(1)** All analysis data obtained shall be included in the analytical database.

**V.D.10.c.(2)** Any data that is considered invalid shall have an explanation defining what basis was used to prove the invalid nature of that data.

**V.D.10.c.(3)** Data that is proven to be invalid shall not be used in calculating the five (5) year rolling total metals feed.

**V.D.10.c.(4)** Re-sampled analytical results are normally considered a voluntary sample and do not impact shifts in sampling frequency. These results are used for calculating the five (5) year rolling total metals feed rate.

**V.D.10.c.(5)** Re-sampled analytical results can impact sampling frequency when the results from the original samples have been proven to be invalid.

**V.D.10.d.** The Administrative Authority reserves the right to review the analytical database, to modify, as appropriate, the classification of valid or invalid data, and to re-calculate mass feed rates and the five (5) year rolling total metals feed.

**V.D.11.** For the metals; antimony, beryllium, cadmium, mercury, silver, thallium and selenium, the Permittee must demonstrate a good-faith effort to monitor and control the metals' feed rates.

**V.D.11.a.** Demonstrate that the detection limit using the best available analytical technology is at or below the following:

**V.D.11.a.(1)** 1.00 ppm for beryllium

**V.D.11.a.(2)** 1.00ppm for cadmium

**V.D.11.a.(3)** 1.00 ppm for chromium

**V.D.11.a.(4)** 0.01 ppm for mercury



**V.D.11.b.** If the Permittee fails to demonstrate the detection limit is at or below the specified values in Conditions V.D.11.a.(1) through (4), demonstrate what the method detection limit is for the sample matrix with the analytical laboratory contracted to perform the analyses in accordance with 40 CFR 136, Appendix B.

**V.D.11.c.** Should an analysis result indicate the presence of a metal at a concentration greater than the method detection limit, the Permittee shall either reduce the hazardous waste feed rate so that the five (5) year rolling total metals feed does not exceed the five (5) year metals feed guideline or demonstrate that the reported analysis result is invalid.

**V.D.12.** The Permittee may request that EPA re-evaluate changes in risk assessment methodology or information and/or waste feed characterization and/or facility operations in order to revise the site-specific, risk-based guideline levels. The Permittee shall identify specifically the basis for requesting re-evaluation and within thirty (30) days of the request, the EPA will respond in writing to indicate if and when the re-analysis will be conducted.

**TABLE 10  
FEED RATE GUIDELINES<sup>1</sup>**

Constituent	Average Annual Metals Feed Rate (kg/yr)	Metals Feed Rate <sup>2</sup> (g/s)	Five (5) Maximum Waste Feed (kg)
Antimony	23,610	7.49 E-1	119,188
Arsenic	1,695	5.38 E-2	8,561
Barium	794	2.52 E-2	4,010
Beryllium	233	7.40 E-3	1,177
Cadmium	5,232	1.66 E-1	26,455
Total Chromium <sup>3</sup>	112	3.57 E-3	568
Lead	2,143	6.80 E-2	10,820
Total Mercury	0.851	2.70 E-5	4.30
Nickel	753	2.39 E-2	3,800
Selenium	114,100	3.62 E-0	576,050
Silver	32,780	1.04 E-0	165,500
Thallium	4,318	1.37 E-1	21,800

<sup>1</sup> Feed rates are based upon a Risk Assessment conducted by the Environmental Protection Agency.

<sup>2</sup> Risk Analysis is based upon the Nebraska Boiler being closed with zero emissions.

<sup>3</sup> Total Chromium established by stack measurement accounting for air pollution control equipment removal efficiency and Chromium VI partition factor.

## **VI. GROUNDWATER PROTECTION**

### **VI.A. APPLICABILITY**

The regulations of Louisiana Administrative Code (LAC), Title 33, Part V, Chapter 3, 5, 15, 19, 21, 33, 35, and 37, and the Louisiana Hazardous Waste Control Law Revised Statute (R.S.) 30:2171 et seq., of the Environmental Quality Control Act, R.S. 30:2001 et seq., and the provisions of this Condition shall apply to ground water protection programs for facilities that are used to treat, store, and dispose hazardous wastes at Georgia Gulf Chemicals and Vinyls, LLC in Westlake, LA. No active permitted units are identified in this permit which are subject to groundwater monitoring at this time.

### **VI.B. REQUIRED PROGRAMS**

The Permittee shall comply with the monitoring, response, and corrective action provisions for the existing and any new systems in accordance with LAC 33:V.Chapter 33 and as outlined in this permit (i.e., Condition VIII, HSWA).

### **VI.C. CORRECTIVE ACTION**

If ground water contamination is confirmed as a result of operations related to past or present hazardous waste management facilities associated with this site, the Permittee shall establish, expand, or continue assessment and corrective action programs in accordance with the requirements of LAC 33:V.Chapter 33 and as subsequently directed by the Administrative Authority.

**HAZARDOUS  
AND  
SOLID  
WASTE  
AMENDMENTS**

## **VII. GENERAL CONDITIONS PURSUANT TO THE HAZARDOUS AND SOLID WASTE AMMENDMENTS**

### **VII.A. STANDARD CONDITIONS**

#### **VII.A.1. Waste Minimization**

Annually, by March 1, for the previous year ending December 31, the Permittee shall enter into the operating record as required by LAC 33:V.1529.B.19, a statement certified according to LAC 33:V.513.A specifying that the Permittee has a program in place to reduce the volume and toxicity of hazardous wastes generated by the facility's operation to the degree determined by the Permittee to be economically practicable; and that the proposed method of treatment, storage, or practicable disposal method that is currently available to the Permittee minimizes the present and future threat to human health and the environment. A current description of the program shall be maintained in the operating record and a copy of the annual certified statement shall be submitted to the Administrative Authority. The following criteria should be considered for the program:

**VII.A.1.a.** Any written policy or statement that outlines goals, objectives, and/or methods for source reduction and recycling of hazardous waste at the facility;

**VII.A.1.b.** Any employee training or incentive programs designed to identify and implement source reduction and recycling opportunities;

**VII.A.1.c.** An itemized list of the dollar amounts of capital expenditures (plant and equipment) and operating costs devoted to source reduction and recycling of hazardous waste;

**VII.A.1.d.** Factors that have prevented implementation of source reduction and/or recycling;

**VII.A.1.e.** Sources of information on source reduction and/or recycling received at the facility (e.g., local government, trade associations, suppliers, etc.);

**VII.A.1.f.** An investigation of additional waste minimization efforts that could be implemented at the facility. This investigation would analyze the potential for reducing the quantity and toxicity of each waste stream through production reformulation, recycling, and all other appropriate means. The analysis would include an assessment of the technical feasibility, cost, and potential waste reduction for each option;

**VII.A.1.g.** A flow chart or matrix detailing all hazardous wastes the facility produces by quantity, type, and building/area;

**VII.A.1.h.** A demonstration of the need to use those processes that produce a particular hazardous waste due to a lack of alternative processes or available technology that would produce less hazardous waste;

**VII.A.1.i.** A description of the waste minimization methodology employed for each related process at the facility. The description should show whether source reduction or recycling is being employed;

**VII.A.1.j.** A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years; and

**VII.A.1.k.** The Permittee may meet the requirements for waste minimization by developing an Environmental Management System according to the EPA document, Integrated Environmental Management System Implementation Guide, EPA 744-R-00-011, October 2000, found on the EPA website at [www.epa.gov/opptintr/dfc/pubs/iems/iems\\_guide/index.htm](http://www.epa.gov/opptintr/dfc/pubs/iems/iems_guide/index.htm).

#### **VII.A.2. Dust Suppression**

Pursuant to LAC 33:V.4139.B.4, and the Toxic Substances Control Act, the Permittee shall not use waste or used oil or any other material which is contaminated with dioxin, polychlorinated biphenyls (PCBs), or any other hazardous waste (other than a waste identified solely on the basis of ignitability), for dust suppression or road treatment.

#### **VII.A.3. Failure to Disclose**

The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts at any time may be cause for termination or modification of this Permit in accordance with LAC 33:323.B.2 and 3.

#### **VII.A.4. Suspension, Modification, or Revocation and Reissuance, and Termination of Permit**

This Permit may be modified, revoked and reissued, or terminated for cause as specified in LAC 33:V.323. The filing of a request by the Permittee for a permit modification, revocation and reissuance, termination, or the notification of planned changes or anticipated noncompliance on the part of the Permittee, does not stay the applicability or enforceability of any permit condition.

**VII.A.4.a.** If the Administrative Authority tentatively decides to modify or revoke and reissue a permit under LAC 33:V.321.C. or 323, a draft permit shall be prepared incorporating the proposed changes. The Administrative Authority may request additional information and, in the case of a modified permit, may require the submission of an updated permit application.

**VII.A.4.b.** The Permittee may initiate permit modification proceedings under LAC 33:V.321.C. All applicable requirements and procedures as specified in LAC 33:V.321.C shall be followed.

**VII.A.4.c.** Modifications of this Permit do not constitute a reissuance of the Permit.

#### **VII.A.5. Permit Review**

This Permit may be reviewed by the Administrative Authority five years after the date of permit issuance and may be modified as necessary as provided for in LAC 33:V.321.C. Nothing in this section shall preclude the Administrative Authority from reviewing and modifying the Permit at any time during its term.

#### **VII.A.6. Compliance with Permit**

Compliance with a RCRA permit during its term constitutes compliance, for purposes of enforcement, with subtitle C of RCRA except for those requirements not included in the permit which:

**VII.A.6.a.** Become effective by statute;

**VII.A.6.b.** Are promulgated under LAC 33:V.Chapter 22 restricting the placement of hazardous wastes in or on the land; or

**VII.A.6.c.** Are promulgated under LAC 33:V.Chapters 23, 25 and 29 regarding leak detection systems for new and replacement surface impoundment, waste pile, and landfill units, and lateral expansions of surface impoundment, waste pile, and landfill units. The leak detection system requirements include double liners, construction quality assurance (CQA) programs, monitoring action leakage rates, and response action plans, and will be implemented through the procedures of LAC 33:V.321.C Class 1 permit modifications.

#### **VII.A.7. Specific Waste Ban**

**VII.A.7.a.** The Permittee shall not place in any land disposal unit the wastes specified in LAC 33:V. Chapter 22 after the effective date of the prohibition unless the Administrative Authority has established disposal or treatment standards for the hazardous waste and the Permittee meets such standards and other applicable conditions of this Permit.

**VII.A.7.b.** The Permittee may store wastes restricted under LAC 33:V.Chapter 22 solely for the purpose of accumulating quantities necessary to facilitate proper recovery, treatment, or disposal provided that it meets the requirements of LAC 33:V.2205 including, but not limited to, clearly marking each tank or container.

**VII.A.7.c.** The Permittee is required to comply with all applicable requirements of LAC 33:V.2245 as amended. Changes to the Waste Analysis Plan will be considered permit modifications at the request of the Permittee, pursuant to LAC 33:V.321.C.

**VII.A.7.d.** The Permittee shall review the waste analysis plan and analyze the waste when a process changes to determine whether the waste meets applicable treatment standards. Results shall be maintained in the operating record pursuant to Condition III.C.1 and 2.

#### **VII.A.8. Information Submittal for the Corrective Action Strategy**

Failure to comply with any condition of the Permit, including information submittals, constitutes a violation of the Permit and is grounds for enforcement action, permit amendment, termination, revocation, suspension, or denial of permit renewal application. Falsification of any submitted information is grounds for termination of this Permit (LAC 33:V.323.B.3).

The Permittee shall ensure that all plans, reports, notifications, and other submissions to the Administrative Authority required by this Permit using the Corrective Action Strategy are signed and certified in accordance with LAC 33:V.Chapter 5, Subchapter B. All submittals required under the corrective action strategy must conform to those requirements outlined in the RECAP (see Condition VIII of this permit). Variance from content and/or formatting guidelines provided under the RECAP shall be requested by the Permittee prior to submittal to the Administrative Authority, as deemed necessary. Approval or disapproval of such a request with further guidance on content and formatting will be provided by the Administrative Authority, as deemed necessary. Five (5) copies each of these plans, reports, notifications or other submissions and one (1) electronic copy (3.5" IBM compatible disk or CD-ROM) of all portions thereof which are in word processing format shall be submitted to the Administrative Authority by Certified Mail or hand delivered to:

**Louisiana Department of Environmental Quality  
Office of Environmental Assessment  
Environmental Technology Division  
P.O. Box 4314  
Baton Rouge, LA 70821-4314**

A summary of the planned reporting milestones pursuant to the corrective action requirements of this Permit is found in Condition VIII, Table 1.

#### **VII.A.9. Data Retention**

All raw data, such as laboratory reports, drilling logs, bench-scale or pilot-scale data, and other supporting information gathered or generated during activities undertaken pursuant to this Permit shall be maintained at the facility during the term of this Permit, including any reissued Permits.

#### **VII.A.10. Management of Wastes**

All solid wastes which are managed pursuant to a remedial measure taken under the corrective action process or as an interim measure addressing a release or the threat of a release from a solid waste management unit shall be managed in a manner protective of human health and the environment and in compliance with all applicable Federal, State and local requirements. As a response to the Louisiana legislature mandate La. R.S. 30:2272 (Act 1092 of the 1995 Regular Session) to develop minimum remediation standards, the LDEQ promulgated the Risk Evaluation Corrective Action Program (RECAP). RECAP's tiered approach to risk evaluation and corrective action establishes not only across the board numerical standards for most media, but also allows for the development of more site-specific numerical standards, as warranted. The Permittee is required to comply with all applicable requirements of RECAP. Approval of units for managing wastes and conditions for operating the units shall be granted through the permitting process.

#### **VII.B. EMISSION STANDARDS - PROCESS VENTS, EQUIPMENT LEAKS, TANKS, SURFACE IMPOUNDMENTS, AND CONTAINERS (AA-BB-CC AIR REGULATIONS)**

**(RESERVED)**

**Note:** In order to prevent redundant regulation, Condition VII.B has been reserved. The Permittee will comply with the provisions of Condition VII.B by complying with the provisions of its Comprehensive Fugitive Emissions Monitoring Program implemented under the facility air permit. Failure by the Permittee to comply with those provisions that are equivalent to the provisions in LAC 33:V.Chapter 17 will also result in a failure to comply with LAC 33:V.Chapter 17.

#### **VII.C. SPECIFIC CONDITION - CLOSURE**

Pursuant to Section 3005(j)(1) of the Hazardous and Solid Waste Amendments of 1984, the Permittee shall close any closing units in accordance with the following provisions:

**VII.C.1.** Other than consolidation of any wastes from the sites in conformance with LAC 33:V.Chapter 22, Land Disposal Restrictions, the Permittee shall not place waste prohibited by LAC 33:V.Chapter 22 into any closing units;

**VII.C.2.** The Permittee shall perform unit closures in accordance with the Closure Plan(s) as approved at the time of closure, and which meet(s) all relevant State and Federal closure requirements at the time of closure; and

**VII.C.3.** The Permittee shall notify the Administrative Authority in writing at least sixty (60) days prior to commencement of closure.



## VIII. SPECIAL CONDITIONS PURSUANT TO HAZARDOUS AND SOLID WASTE AMENDMENTS—CORRECTIVE ACTION STRATEGY

Corrective Action for Releases: Section 3004(u) of RCRA, as amended by the Hazardous and Solid Waste Amendments (HSWA), and LAC 33:V.3322 require that permits issued after November 8, 1984, address corrective action for releases of hazardous waste or hazardous constituents from any solid waste management unit at the facility, regardless of when the waste was placed in the unit.

EPA's traditional RCRA corrective action approach is structured around several elements common to most activities. In the first phase, RCRA facility assessment (RFA), EPA or the authorized state assesses the facility to identify releases and determine the need for corrective action. In the second phase, RCRA facility investigation (RFI), the facility conducts a more detailed investigation to determine the nature and extent of contaminants released to ground water, surface water, air, and soil. If remedial action is needed, a third phase, corrective measures study (CMS), is started. During this phase, the facility conducts a study, which when completed, describes the advantages, disadvantages, and costs of various cleanup options. After selection of a final remedy, the fourth phase, corrective measures implementation (CMI), is initiated. The facility is required to design, construct, operate, maintain, and monitor the final remedy(s).

The Corrective Action Strategy (CAS) is an alternate corrective action approach that can be implemented during any phase of corrective action for a release area. The Permittee shall use the CAS approach as the framework for corrective action to clarify, facilitate and expedite the process, and shall use the **Louisiana Department of Environmental Quality Risk Evaluation/Corrective Action Program (RECAP)** for screening and media-specific cleanup standards. EPA has interpreted the term "release" to mean, "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." (50 FR 2873, July 15, 1985). The CAS refers to "release areas" as solid waste management units (SWMUs) and areas of concern (AOCs) while the RECAP refers to release areas as areas of investigation (AOIs). SWMUs and AOCs may also be referred to as "AOIs" when investigated and managed under the RECAP.

### VIII.A. ALTERNATE CORRECTIVE ACTION

#### VIII.A.1. Introduction to CAS

This Permit will utilize the CAS Guidance Document ([www.epa.gov/Arkansas/6pd/rcra\\_c/pd-o/riskman.htm](http://www.epa.gov/Arkansas/6pd/rcra_c/pd-o/riskman.htm)) developed by the U.S. Environmental Protection Agency (EPA) Region 6 whenever the Administrative Authority determines that it will serve to facilitate the corrective action. The CAS Guidance Document shall be utilized to the fullest extent practicable for planning and implementation of the corrective action. The CAS in this Permit shall not supersede existing Federal, State, and local regulations. The two primary objectives are to prioritize corrective action at the facility, and streamline corrective action administrative procedures, resulting in the protection of human health and the environment.

The CAS is a performance-based approach; using data quality objectives, investigations begin with the endpoint in mind. The CAS is a risk management strategy that can be implemented during any phase of corrective action. However, the CAS need not be applied to work that has already been completed to the satisfaction of the Administrative Authority. Performance standards are established at the beginning of the corrective action process, allowing earlier and more focused implementation. Releases are screened using RECAP screening numbers to determine the priority of corrective action, and remedial alternatives are selected on the basis of their ability to achieve and maintain the established performance standards.

There is no one specific path through the CAS process. The CAS is a facility-wide approach, focusing corrective action on releases that pose the greatest risk first. Screening releases will also enable some areas of interest to qualify for no further action at this time (Condition VIII.A.3.a.), thus resources can be used to best benefit the protection of human health and the environment. The CAS process also considers activities previously conducted under the traditional RCRA corrective action process. Appendix 1 of this permit contains a summary of corrective action activities completed to date and also describes where the Permittee is in the CAS process at the time of issuance of this permit. The applicability of various provisions of the CAS will depend on where the Permittee is in the CAS process as detailed in Appendix 1.

The traditional RCRA corrective action process and reports (i.e., RFIs, CMSs, CMIs, etc.) are not elements of the CAS. However, the use of information and reports from the traditional corrective action process, if available, is encouraged, in addition to new site-specific information.

The Administrative Authority, through an agency-initiated permit modification, may remove the CAS as the means of facility-wide corrective action in the case of the failure of the Permittee to disclose information, abide by the terms and conditions of this permit, adhere to agreed schedules, or show adequate progress; or should an impasse occur between the Permittee and the Administrative Authority. The Administrative Authority will institute other means of corrective action (such as traditional corrective action) at the facility through modification of this permit.

#### **VIII.A.2. Performance Standards**

Expectations for the outcome of corrective action at a facility are established in the CAS by three performance standards as defined in Conditions VIII.A.2.a through c. The Permittee's proposed performance standards shall be presented during the scoping meeting. The Permittee must justify the proposed performance standards through evaluation and documentation of land use, ground water designation (current and reasonably expected future use), types of receptors present, exposure pathways, etc.; as described in RECAP, Chapter 2. Through the application of the performance standards and RECAP, the Permittee and Administrative Authority shall determine whether a release must be addressed through corrective action, and whether implemented corrective actions are protective of human health and the environment.

The Permittee shall submit the performance standards in writing along with the Conceptual Site Model (Condition VIII.D) within one-hundred and twenty (120) days after the scoping meeting. The Administrative Authority may either approve the performance standards proposed by the Permittee or establish performance standards that the Administrative Authority deems necessary to protect human health and the environment.

The three CAS performance standards are defined below. The order in which the performance standards are listed does not indicate that one performance standard takes priority over another. All applicable performance standards must be achieved by the Permittee.

#### **VIII.A.2.a. Source Control Performance Standard**

Source control refers to the control of materials that include or contain hazardous wastes or hazardous constituents that act as a reservoir for migration of contamination to soil, sediment, ground water, surface water, or air, or as a source for direct exposure.

The facility must determine if source material is present. Removal, containment, treatment, or a combination of the three, must be evaluated on a case-by-case basis. Controlling source material is a predominating issue in the CAS, and must be addressed to ensure protectiveness over time. Prioritization of the SWMUs and AOCs does not mean avoidance of controlling source materials.

#### **VIII.A.2.b. Statutory and Regulatory Performance Standard**

Applicable statutory and regulatory requirements (Federal, State, and local) must be identified. These requirements may dictate media-specific contaminant levels (e.g., maximum contaminant levels (MCLs) in drinking water) that must be achieved and may become a performance standard for the Permittee.

#### **VIII.A.2.c. Final Risk Goal Performance Standard**

The final risk goal is the level of protection to be achieved and maintained by the Permittee. The final risk goal shall be based on site-specific issues including land use, special subpopulations, contaminant concentrations based on acceptable risk, location at which the levels are measured, and the remediation time frame, as specified by RECAP.

One final risk goal may apply to the entire facility, but it is more likely that different releases will require different final risk goals due to variations in location of releases, land use, proximity of receptors, etc. The final risk goal will be based on sound risk assessment methodologies (Condition VIII.A.3).

### **VIII.A.3. Use of RECAP**

The latest edition of the RECAP document shall be used by the Permittee to determine the need for further corrective actions under this permit. The RECAP consists of a tiered framework comprised of a Screening Option (SO), and three Management Options (MO). The tiered management options allow site evaluation and corrective action efforts to be tailored to site conditions and risks. As the MO level increases, the approach becomes more site-specific and hence, the level of effort required to meet the objectives of the Option increases.

The RECAP shall be used by the Permittee to evaluate data quality and data usability (RECAP Section 2.4 and 2.5), to determine the identity of an AOI as described in RECAP Section 2.6, and for estimations of Area of Investigation Concentrations and Groundwater Compliance Concentrations for each media as defined in RECAP Section 2.8.

The RECAP shall be used by the Permittee to evaluate land use as described in RECAP Section 2.9, and groundwater/aquifer use as described in RECAP Section 2.10.

The RECAP shall be used by the Permittee to prioritize AOCs, SWMUs, and AOIs that require remediation so site investigations are focused on the release areas that pose the greatest risk. As the CSM is compiled, the Permittee shall assess historical data (RECAP Section 2.5) and use the following management options, as appropriate, to address each release site.

#### **VIII.A.3.a. Screening Option**

The Permittee shall use the Screening Standards (SS) which are LDEQ-derived screening numbers for soil and groundwater for non-industrial and industrial land use scenarios. The SS shall be used to demonstrate that an AOI does not pose a threat to human health and the environment and, hence does not require further action at this time (NFA-ATT) or that further evaluation is warranted under a higher Management Option.

#### **VIII.A.3.b. Management Option 1**

The Permittee shall use Management Option 1 (MO-1) which provides a RECAP standard (RS) derived for non-industrial and industrial exposure scenarios using currently recommended default exposure parameters and toxicity values. Under MO-1, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-1 limiting RS, then the Permittee may; (1) remediate to the MO-1 limiting RS (and comply with closure/post closure requirements for MO-1), or (2) proceed with a MO-2 or MO-3 evaluation.

#### **VIII.A.3.c. Management Option 2**

The Permittee shall use Management Option 2 (MO-2) which provides for the development of soil and groundwater RS using site-specific data with specified analytical models to evaluate constituent fate and transport at the AOI. The results of this evaluation shall be used in conjunction with standard reasonable maximum exposure (RME) assumptions to identify site-specific MO-2 RS. Under MO-2, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-2 limiting RS, then the Permittee may; (1) remediate to the MO-2 limiting RS (and comply with closure/post closure requirements for MO-2), or (2) proceed with a MO-3 evaluation.

#### **VIII.A.3.d. Management Option 3**

The Permittee shall use Management Option 3 (MO-3) which provides the option of using site-specific data for the evaluation of exposure and the evaluation of environmental fate and transport at the AOI. The results of the site-specific evaluation may be to develop site-specific MO-3 RS. Under MO-3, an AOI may warrant a NFA-ATT determination, or if an exposure, source, or compliance concentration detected at the AOI exceeds a MO-3 limiting RS, then the Permittee shall; (1) remediate to the MO-3 RS, (2) conduct confirmatory sampling, and (3) comply with closure/post closure requirements for MO-3.

#### **VIII.A.4. Corrective Action for Releases Beyond Facility Boundary**

Section 3004(v) of RCRA as amended by HSWA, and State regulations promulgated as LAC 33:V.3322.C require corrective actions beyond the facility property boundary, where necessary to protect human health and the environment, unless the Permittee demonstrates that, despite the Permittee's best efforts, the Permittee was unable to obtain the necessary permission to undertake such actions. The Permittee is not relieved of all responsibility to clean up a release that has migrated beyond the facility boundary where offsite access is denied.

#### **VIII.A.5. Financial Responsibility**

Assurances of financial responsibility for corrective action shall be provided by the Permittee as specified in the Permit following major modification for remedy selection. The Administrative Authority reserves the right to require financial assurance prior to remedy selection based upon facility compliance history, the extent and degree of contamination, financial health of the Permittee, and input from the public.

#### **VIII.A.6. Summary of Corrective Action Activities**

A summary of the corrective action activities associated with the facility is provided in Condition VIII, Appendix 1 of this permit. AOCs and SWMUs that are currently being managed or proposed for management under a prescribed corrective action program (e.g., groundwater order, corrective action order, CERCLA) are identified in Condition VIII, Appendix 1, Table 1 of this permit.

#### **VIII.A.7. Approval of Alternate Schedule**

The Permittee may submit a written request for an alternate schedule for a submittal deadline as presented in Condition VIII, Table 1. The request should propose a specific alternate schedule and include an explanation as to why the alternate schedule is necessary. The Administrative Authority will consider site-specific criteria in either approving or disapproving the request for an alternate schedule.

### **VIII.B. PROJECT DEVELOPMENT AND SCOPING MEETING**

#### **VIII.B.1. Notice of Intent**

The Permittee must submit to the Administrative Authority a Notice of Intent to conduct corrective action using the CAS within sixty (60) days of the effective date of this permit. The notice of intent should state the following in a concise manner:

**VIII.B.1.a.** General information regarding facility location;

**VIII.B.1.b.** General information regarding the facility's operational history;

**VIII.B.1.c.** General discussion on how the Permittee will proceed through the CAS;

**VIII.B.1.d.** Brief description of proposed performance standards for corrective action; and

**VIII.B.1.e.** Propose a date for a scoping meeting between the Permittee and the Administrative Authority to be held within sixty (60) days of the date of the Notice of Intent.

#### **VIII.B.2. Scoping Meeting**

The scoping meeting will serve as the first CAS milestone where the Permittee and the Administrative Authority identify expectations concerning CAS implementation. The length and extent of the meeting will depend on the complexity of the site. Agreements on land use, groundwater classification, the level of detail required in the

conceptual site model (see Condition VIII.D) and expectations for remediation goals will be discussed during the scoping meeting(s). During the scoping meeting the Permittee will present the following information to the Administrative Authority:

**VIII.B.2.a.** A conceptual site model (if one already has been developed);

**VIII.B.2.b.** Discussions on history of corrective action at the facility, including facility investigations, risk evaluations or risk assessments, interim measure/stabilizations and final remedies implemented;

**VIII.B.2.c.** Proposed performance standards for the facility with justification, and potential risk management approaches;

**VIII.B.2.d.** Discussions on how the Permittee plans to use the CAS to meet its corrective action obligations, including permitting and compliance issues;

**VIII.B.2.e.** A Communication Strategy Plan that specifies where in the CAS process the Permittee is currently and how the Permittee will provide information about future progress at the facility to the Administrative Authority (i.e., progress reports, conference calls, routine meetings, etc.);

**VIII.B.2.f.** Site-specific concerns (i.e., sensitive environments or special subpopulations);

**VIII.B.2.g.** Need for interim measures or stabilization activities, if necessary; and

**VIII.B.2.h.** Schedule for submittal of the CAS Investigation Workplan and proposed schedule for conducting and completing CAS requirements, including public participation.

Information plans and reports that have already been developed by the Permittee during the corrective action process can be referenced during the scoping meeting. The Permittee must coordinate with the Administrative Authority in order to determine the date, time, and location of the scoping meeting.

### **VIII.C. REPORTING REQUIREMENTS**

**VIII.C.1.** The Permittee shall submit, in accordance with Condition VII.A.8, signed reports of all activities conducted pursuant to the provisions of this Permit as required by the Administrative Authority. The reporting schedule shall be determined on a case-by-case basis by the Administrative Authority. These reports shall contain, as applicable to the stage of corrective action, the information required by CAS, as well as the following:

**VIII.C.1.a.** A description of the work completed and an estimate of the percentage of work completed;

**VIII.C.1.b.** Summaries of all findings, including summaries of laboratory data;

**VIII.C.1.c.** Summaries of all problems or potential problems encountered during the reporting period and actions taken to rectify problems;

**VIII.C.1.d.** Projected work for the next reporting period;

**VIII.C.1.e.** Summaries of contacts pertaining to corrective action or environmental matters with representatives of the local community, public interest groups or State government during the reporting period;

**VIII.C.1.f.** Changes in key project personnel during the reporting period; and

**VIII.C.1.g.** Summaries of all changes made in implementation during the reporting period.

**VIII.C.2.** Copies of other reports relating to or having bearing upon the corrective action work (e.g., inspection reports, drilling logs and laboratory data) shall be made available to the Administrative Authority upon request.

**VIII.C.3.** In addition to the written reports as required in Condition VIII.C.1 and VIII.C.2 above, at the request of the Administrative Authority, the Permittee shall provide status review through briefings with the Administrative Authority.

**VIII.C.4.** The determination and approval of remedy selections, schedules of submittals and minor changes to any corrective action workplans may be made by the Administrative Authority during the scoping meeting or status review briefings as described in Condition VIII.C.3.

#### **VIII.D. SPECIFIC CONDITION – CONCEPTUAL SITE MODEL (CSM)**

No later than 120 days after the scoping meeting, the Permittee shall submit to the Administrative Authority a CSM (along with the Performance Standards detailed in Condition VIII.A.2) or an update of any CSM submitted at the scoping meeting providing background information and the current conditions at the facility. The level of detail required for the CSM will be discussed during the scoping meeting. At a minimum, the CSM must address current site conditions, land use, known and/or potential constituent source(s), routes of constituent migration, exposure media (i.e., soil, surface waters, groundwater), exposure points, points of compliance and pathways, receptors and source media to be evaluated under the RECAP. The CSM must include a completed Figure 8 (LAC 33:1.Chapter 13). The Permittee may include completed investigations, existing data, or previously submitted documents in the CSM by reference. References must include the names, dates, and brief summaries of the documents.



If a CSM has been previously developed, the scoping meeting will also provide the opportunity for the Permittee and Administrative Authority to consider and identify all data gaps in the CSM. The initial CSM shall be considered the "base document" to be prepared and updated by the facility as new information is gathered during investigations. The CSM shall be used by the facility to make decisions regarding risk management options, ecological risk, and monitored natural attenuation determinations (RECAP Section 2.16), or technical impracticability (TI) waiver determinations, when appropriate.

The Administrative Authority reserves the right to require revisions to the CSM based upon data resulting from ongoing investigations and activities. Revisions to the CSM may also be required for newly identified SWMUs or AOCs according to Condition VIII.L of this permit (See Appendix 1, Ongoing Corrective Action) and based on new information and information not previously considered by the Administrative Authority.

The CSM shall be divided into Profiles as detailed in Conditions VIII.D.1 through 6. If the Permittee chooses to use existing data and documents in the CSM, it may not be necessary to prepare the Profiles as detailed in Conditions VIII.D.1 through 6. However, the existing documents and data must provide sufficient information and detail which corresponds to the information required by the Facility, Land Use and Exposure, Physical, Release, Ecological, and Risk Management Profiles.

#### **VIII.D.1. Facility Profile**

The Permittee shall include in the CSM a Facility Profile which shall summarize the regional location, pertinent boundary features, general facility structures, process areas, and locations of solid waste management units or other potential sources of contaminant migration from the routine and systematic releases of hazardous constituents to the environment (e.g., truck or railcar loading/unloading areas). The Permittee shall also include historical features that may be potential release areas because of past management practices. The Facility Profile shall include:

**VIII.D.1.a.** Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

**VIII.D.1.a.(1)** General geographic location;

**VIII.D.1.a.(2)** Property lines with the owners of all adjacent property clearly indicated;

**VIII.D.1.a.(3)** Facility structures, process areas and maintenance areas;

**VIII.D.1.a.(4)** Any other potential release areas shall be delineated, such as railcar loading/unloading areas or any other AOI as described in RECAP Section 2.6; and

**VIII.D.1.a.(5)** Locations of historical features that may be potential release areas or any areas of past solid and hazardous waste generation, treatment, storage or disposal activities.

**VIII.D.1.b.** The Facility Profile shall also include a description of ownership and operation of the facility.

**VIII.D.1.c.** The Permittee shall provide pertinent information for those spills that have not been assessed and reported to the Administrative Authority during facility investigations, addressed by facility spill contingency plans, or previously remediated or deemed for no further action. The information must include at minimum, approximate dates or periods of past waste spills, identification of the materials spilled, the amount spilled, the location where spilled, and a description of the response actions conducted (local, state, federal, or private party response units), including any inspection reports or technical reports generated as a result of the response.

#### **VIII.D.2. Land Use and Exposure Profile**

The Permittee shall include in the CSM a Land Use and Exposure Profile which includes surrounding land uses (industrial and non-industrial, as described in RECAP Sections 2.9.1 and 2.9.2), resource use locations (water supply wells, surface water intakes, etc.), beneficial resource determinations (groundwater classifications as described in RECAP Section 2.10), natural resources (wetlands, etc.), sensitive subpopulation types and locations (schools, hospitals, nursing homes, day care centers, etc.), applicable exposure scenarios, and applicable exposure pathways identifying the specific sources, releases, migration mechanisms, exposure media, exposure routes and receptors. The Land Use and Exposure Profile shall include:

**VIII.D.2.a.** Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

**VIII.D.2.a.(1)** Surrounding land uses, resource use locations, and natural resources/wetlands;

**VIII.D.2.a.(2)** Locations of sensitive subpopulations; and

**VIII.D.2.a.(3)** An exposure pathway flowchart which outlines sources, migration pathways, exposure media and potential receptors as depicted in Figure 8 (CMS example) of the RECAP.

### **VIII.D.3. Physical Profile**

The Permittee shall include in the CSM a Physical Profile which shall describe the factors that may affect releases, fate and transport, and receptors, including; topography, surface water features, geology, and hydrogeology. The Physical Profile shall include:

**VIII.D.3.a.** Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V.Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

**VIII.D.3.a.(1)** Topographic maps with a contour interval of five (5) or ten (10) feet, a scale of one inch to 100 feet (1:100), including hills, gradients, and surface vegetation or pavement;

**VIII.D.3.a.(2)** Surface water features including routes of all drainage ditches, waterways, direction of flow, and how they migrate to other surface water bodies such as canals and lakes;

**VIII.D.3.a.(3)** Regional geology including faulting and recharge areas, as well as local geology depicting surface features such as soil types, outcrops, faulting, and other surface features;

**VIII.D.3.a.(4)** Subsurface geology including stratigraphy, continuity (locations of facies changes, if known), faulting and other characteristics;

**VIII.D.3.a.(5)** Maps with hydrogeologic information identifying water-bearing zones, hydrologic parameters such as transmissivity, and conductivity. Also locations and thicknesses of aquitards or impermeable strata; and

**VIII.D.3.a.(6)** Locations of soil borings and production and groundwater monitoring wells, including well log information, and construction of cross-sections which correlate substrata. Wells shall be clearly labeled with ground and top of casing elevations (can be applied as an attachment).

### **VIII.D.4. Release Profile**

The Permittee shall include in the CSM a Release Profile which shall describe the known extent of contaminants in the environment, including sources, contaminants of concern (COC), areas of investigations, distribution and magnitude of known COCs

with corresponding sampling locations, and results of fate and transport modeling depicting potential future extent/magnitude of COCs. The Release Profile shall include:

**VIII.D.4.a.** Map(s) and other documents depicting the following information (all maps shall be consistent with the requirements set forth in LAC 33:V. Chapter 5 and be of sufficient detail and accuracy to locate and report all current site conditions):

**VIII.D.4.a.(1)** Estimations of source concentrations, exposure concentrations and compliance concentrations for each affected media as defined in Section 2.8 of RECAP;

**VIII.D.4.a.(2)** Isopleth maps depicting lateral extent and concentrations of COCs;

**VIII.D.4.a.(3)** Results of fate and transport modeling showing potential exposure concentrations and locations; and

**VIII.D.4.a.(4)** Locations of potential sources including past or present waste units or disposal areas and all SWMUs/AOCs.

**VIII.D.4.b.** Table(s) depicting the following information for each SWMU/AOC, including but not limited to: location; type of unit/disposal/release area; design features; operating practices (past and present); period of operation; age of unit/disposal/release area; general physical condition; and method of closure.

**VIII.D.4.c.** Table(s) depicting the following waste/contaminant characteristics for those areas referenced in Condition VIII.D.4.b, including but not limited to: type of waste placed in the unit (hazardous classification, quantity, chemical composition), physical and chemical characteristics (physical form, description, temperature, pH, general chemical class, molecular weight, density, boiling point, viscosity, solubility in water, solubility in solvents, cohesiveness, vapor pressure); and migration and dispersal characteristics of the waste (sorption coefficients, biodegradability, photodegradation rates, hydrolysis rates, chemical transformations).

#### **VIII.D.5. Ecological Profile**

The Permittee shall include in the CSM an Ecological Profile that shall describe the physical relationship between the developed and undeveloped portions of the facility, the use and level of disturbance of the undeveloped property, and the type of ecological receptors present in relation to completed exposure pathways.

When compiling data for the Ecological Profile, current, as well as, future impacts to receptors and/or their habitats shall be considered. The Ecological Profile shall include:

**VIII.D.5.a.** A history and description of the developed property on the facility, including structures, process areas, waste management units, and property boundaries;

**VIII.D.5.b.** A history and description of the undeveloped property, including habitat type (wetland, grassy area, forest, ponds, etc.). Include a description of the primary use, degree and nature of any disturbance, along with proximity to drainage ditches, waterways and landfill areas;

**VIII.D.5.c.** A description of the site receptors in relation to habitat type, including endangered or protected species, mammals, birds, fish, etc.;

**VIII.D.5.d.** A description of the relationship between release areas and habitat areas, specifically relating chemicals of potential ecological concern (COEC) to ecological receptors;

**VIII.D.5.e.** An ecological checklist as described in Section 7.0 of RECAP. An ecological checklist (presented in Appendix C, Form 18 of the RECAP) shall be used to determine if a tier 1 (screening level) Ecological Risk Assessment (ERA) is warranted.

#### **VIII.D.6. Risk Management Profile**

The Permittee shall include in the CSM a Risk Management Profile that shall describe how each AOI at the facility will be managed for the protection of human health and the environment. The Risk Management Profile will serve as documentation of the results of the site ranking system (described in Section 2.2 of RECAP). The Risk Management Profile will also document the criteria and verify that the SO, MO-1, MO-2 or MO-3 is appropriate for application at each AOI. The Risk Management Profile shall include:

**VIII.D.6.a.** A table for tracking the management options for each AOI, and the determination made, whether an AOI is deemed for no further action at this time (NFA-ATT) or is going to use either the SO, MO-1, MO-2 or MO-3 management option.

**VIII.D.6.b.** A list of identified site-wide data gaps for further investigation.

**VIII.D.6.c.** Documentation of all interim measures which have been or are being undertaken at the facility, including under State or Federal compliance orders, other than those specified in the Permit. This documentation shall include the objectives of the interim measures and how the measure is mitigating a potential threat to human health or the environment and/or is consistent with and integrated into requirements for a long term remedial solution.

## **VIII.E. INTERIM MEASURES**

**VIII.E.1.** If at any time during the term of this Permit, the Administrative Authority determines that a release or potential release of hazardous constituents from a SWMU/AOC poses a threat to human health and the environment, the Administrative Authority may require interim measures. The Administrative Authority shall determine the specific measure(s) or require the Permittee to propose a measure(s). The interim measure(s) may include a permit modification, a schedule for implementation, and an Interim Measures Workplan. The Administrative Authority may modify this Permit according to LAC 33:V.321 to incorporate interim measures into the Permit. However, depending upon the nature of the interim measures, a permit modification may not be required.

**VIII.E.2.** The Permittee may propose interim measures at any time by submittal of an Interim Measures Workplan subject to the approval of the Administrative Authority.

**VIII.E.3.** The Administrative Authority shall notify the Permittee in writing of the requirement to perform interim measures and may require the submittal of an Interim Measures Workplan. The following factors will be considered by the Administrative Authority in determining the need for interim measures and the need for permit modification:

**VIII.E.3.a.** Time required to develop and implement a final remedy;

**VIII.E.3.b.** Actual and potential exposure to human and environmental receptors;

**VIII.E.3.c.** Actual and potential contamination of drinking water supplies and sensitive ecosystems;

**VIII.E.3.d.** The potential for further degradation of the medium in the absence of interim measures;

**VIII.E.3.e.** Presence of hazardous wastes in containers that may pose a threat of release;

**VIII.E.3.f.** Presence and concentration of hazardous waste including hazardous constituents in soil that has the potential to migrate to ground water or surface water;

**VIII.E.3.g.** Weather conditions that may affect the current levels of contamination;

**VIII.E.3.h.** Risks of fire, explosion, or accident; and

**VIII.E.3.i.** Other situations that may pose threats to human health and the environment.

**VIII.E.5.** Upon approval of the Interim Measures Workplan and completion of the interim measure(s) implementation, the Permittee will submit a report to the Administrative Authority describing the completed work.

**VIII.E.6.** At anytime during or after the interim measure(s), including the issuance of an NFA-ATT, the Administrative Authority may require the Permittee to submit the SWMUs/AOCs for further corrective action.

#### **VIII.F. CAS (CORRECTIVE ACTION STRATEGY) INVESTIGATION WORKPLAN**

**VIII.F.1.** The CAS Investigation Workplan that describes site investigation activities for corrective action shall be submitted to the Administrative Authority within 180 days after the scoping meeting between the Permittee and the Administrative Authority. The CAS Investigation Workplan must address releases of hazardous waste or hazardous constituents to all media, unless otherwise indicated, for those SWMUs/AOCs listed in Appendix 1, Table 1. The focus of the site investigation phase for corrective action is to collect data to fill in data gaps identified in the CSM. The corrective action investigations may be conducted in phases if warranted by site conditions, contingent upon approval by the Administrative Authority.

**VIII.F.1.a.** The CAS Investigation Workplan shall describe the management options (MO) for each AOI/release area, data quality objectives for achieving each management option, and proposals for release characterizations (sampling and analysis/quality assurance plans) to support the data quality objectives (DQOs). (DQOs are determined based on the end use of the data to be collected, and the DQO development process should be integrated into project planning and refined throughout the CAS implementation. DQOs shall be used to 1) ensure that environmental data are scientifically valid, defensible, and of an appropriate level of quality given the intended use, and 2) expedite site investigations. The CAS Investigation Workplan is required to have DQOs that are developed to support the performance standard for each release.) The CAS Investigation Workplan shall detail all proposed activities and procedures to be conducted at the facility, the schedule for implementing and completing such investigations, the qualifications of personnel performing or directing the investigations, including contractor personnel, and the overall management of the site investigations. The scope of work for the site investigation can be found in RECAP Appendix B.

**VIII.F.1.b.** The CAS Investigation Workplan shall describe sampling, data collection quality assurance, data management procedures (including formats for documenting and tracking data and other results of investigations) and health and safety procedures.

**VIII.F.1.c.** Development of the CAS Investigation Workplan and reporting of data shall be consistent with the latest version of the following EPA and State guidance documents or the equivalent thereof:

**VIII.F.1.c.(1)** Guidance for the Data Quality Assessment, Practical Methods for Data Analysis. QA97 Version EPA QA/G-9. January 1998;

**VIII.F.1.c.(2)** Guidance for the Data Quality Objectives Process. EPA QA/G-4. September 1994;

**VIII.F.1.c.(3)** Data Quality Objectives Remedial Response Activities. EPA/540/G87-003. March 1987;

**VIII.F.1.c.(4)** Guidance on Quality Assurance Project Plans. EPA QA/G-5. February 1998;

**VIII.F.1.c.(5)** Interim EPA Data Requirements for Quality Assurance Project Plans. EPA Region 6, Office of Quality Assurance. May 1994;

**VIII.F.1.c.(6)** 29 CFR 1910.120 (b) for the elements to Health and Safety plans;

**VIII.F.1.c.(7)** RCRA Groundwater Monitoring: Draft Technical Guidance EPA/530-R-93-001 November 1992;

**VIII.F.1.c.(8)** Test Methods for Evaluating Solid Waste, Physical/Chemical Methods; SW-846, 3<sup>rd</sup> Edition. November 1992, with revisions;

**VIII.F.1.c.(9)** The LDEQ Handbook - **Construction of Geotechnical Boreholes and Groundwater Monitoring Systems," prepared by the LDEQ and the Louisiana Department of Transportation and Development.** This document is printed by and available from the Louisiana Department of Transportation and Development, Water Resources Section, P. O. Box 94245, Baton Rouge, Louisiana 70804-9245; and

**VIII.F.1.c.(10)** The LAC 33:I.Chapter 13 and Louisiana Department of Environmental Quality Risk Evaluation/Corrective Action Program (RECAP).



**VIII.F.2.** After the Permittee submits the CAS Investigation Workplan; the Administrative Authority will approve, disapprove, or otherwise modify the CAS Investigation Workplan in writing. All approved workplans become enforceable components of this Permit.

In event of disapproval (in whole or in part) of the workplan, the Administrative Authority shall specify deficiencies in writing. The Permittee shall modify the CAS Investigation Workplan to correct these within the time frame specified in the notification of disapproval by the Administrative Authority. The modified workplan shall be submitted in writing to the Administrative Authority for review. Should the Permittee take exception to all or part of the disapproval, the Permittee shall submit a written statement of the ground for the exception within fourteen (14) days of receipt of the disapproval.

**VIII.F.3.** The Administrative Authority shall review for approval, as part of the CAS Investigation Workplan or as a new workplan, any plans developed pursuant to Condition VIII.L addressing further investigations of newly-identified SWMUs/AOCs, or Condition VIII.M addressing new releases from previously-identified SWMUs/AOCs.

#### **VIII.G. IMPLEMENTATION OF SITE INVESTIGATION ACTIVITIES UNDER CAS**

No later than fourteen (14) days after the Permittee has received written approval from the Administrative Authority for the CAS Investigation Workplan, the Permittee shall implement the site investigation activities according to the schedules and in accordance with the approved CAS Investigation Workplan and the following:

**VIII.G.1.** The Permittee shall notify the Administrative Authority at least 10 working days prior to any field sampling, field-testing, or field monitoring activity required by this Permit to give LDEQ personnel the opportunity to observe investigation procedures and/or split samples.

**VIII.G.2.** Deviations from the approved CAS Investigation Workplan, which are necessary during implementation, must be approved by the Administrative Authority and fully documented and described in the progress reports (Condition VIII.C), RECAP Report (Condition VIII.H) and the final Risk Management Plan (Condition VIII.J).

#### **VIII.H. RECAP REPORT**

Within ninety (90) days after completion of the site investigation the Permittee shall submit a RECAP Report to the Administrative Authority for approval. The RECAP Report shall document the results of the site investigation activities, and the evaluation of the impacts from releases. The Administrative Authority will review and evaluate the report and provide the Permittee with written notification of the report's approval or a notice of deficiency. If the Administrative Authority determines the RECAP Report does not fully meet the

objectives stated in the CAS Investigation Workplan (Permit Condition VIII.F), the Administrative Authority shall notify the Permittee in writing of the report's deficiencies, and specify a due date for submittal of a revised Final Report to the Administrative Authority.

**VIII.H.1.** The Permittee shall screen site-specific data using the appropriate RECAP standard (RS) for each AOI (depending on the MO), evaluate impacts from releases with exposure scenario evaluations, and update the Risk Management Profile of the CSM.

**VIII.H.2.** The report shall include, but not be limited to, the following:

**VIII.H.2.a.** Documentation of site investigation activities and results;

**VIII.H.2.b.** Evaluation of exposure scenarios to document impacts from releases;

**VIII.H.2.c.** Deviations from the CAS Investigation Workplan;

**VIII.H.2.d.** Results of screening activities using RECAP standards (RS), including SO, MO-1, MO-2, or MO-3 RS for each media;

**VIII.H.2.e.** The revised CSM with updated profiles which incorporate investigation and screening results; and

**VIII.H.2.f.** Proposed revisions to performance standards based on new information (e.g., change in land use, difference in expected receptors and/or exposure, or other differences in site conditions), if warranted.

## **VIII.I. REMEDIAL ALTERNATIVES STUDY**

Upon completion and approval of the RECAP Report, the Permittee shall proceed with the evaluation of remedial alternatives to complete corrective action for each AOI according to the performance standards described in Condition VIII.A.2. The remedial alternatives shall be submitted to the Administrative Authority in the Remedial Alternatives Study (RAS) within ninety (90) days of the Administrative Authority's approval of the RECAP Report. In the Remedial Alternatives Study, the Permittee shall identify and evaluate various potential remedies that would meet the performance-based corrective action objectives and propose one or more specific remedies based on an evaluation of applicable data and available corrective action technologies. The RAS shall be prepared in a manner that addresses the extent and nature of the contamination at the facility.

**VIII.I.1.** The Permittee shall evaluate remedies for each AOI that shall:

**VIII.I.1.a.** attain compliance with corrective action objectives for releases of hazardous waste and/or hazardous constituents, as established in the

Conceptual Site Model or in later investigations approved by the Administrative Authority;

**VIII.I.1.b.** control sources of releases;

**VIII.I.1.c.** meet acceptable waste management requirements;

**VIII.I.1.d.** protect human health and the environment; and

**VIII.I.1.e.** meet applicable statutory and regulatory requirements (as noted in Condition VIII.A.2.b).

**VIII.I.2.** The Permittee shall evaluate the use of presumptive remedies and innovative technologies to achieve the appropriate remedial performance standards for each AOI.

**VIII.I.3.** The Permittee shall review the current interim measures/ stabilization activities to evaluate if these measures meet all the criteria for final remedy.

**VIII.I.4.** If under certain site-specific conditions, or when it is not technically or economically feasible to attain the corrective action objectives, the Permittee may propose to use institutional controls to supplement treatment or containment-based remedial actions upon approval of the Administrative Authority (Section 2.15 of RECAP).

**VIII.I.5.** The RAS shall at a minimum include:

**VIII.I.5.a.** An evaluation of the performance reliability, ease of implementation, and the potential impacts of the potential remedies;

**VIII.I.5.b.** An assessment of the effectiveness of potential remedies in achieving adequate control of sources and meeting remedial performance standards;

**VIII.I.5.d.** An assessment of the costs of implementation for potential remedies;

**VIII.I.5.e.** An assessment of the time required to begin and complete the remedy;

**VIII.I.5.f.** An explanation of the rationale for the remedy proposed for each AOI or group of AOIs; and

**VIII.I.5.g.** An assessment of institutional requirements (e.g., state permit requirements that may impact remedy implementation).

**VIII.I.6.** The Administrative Authority will review and evaluate the RAS and provide the Permittee with written notification of the study's approval or a notice of deficiency. If the Administrative Authority determines the RAS does not fully meet the requirements detailed in Conditions VIII.I.1 through VIII.I.5, the Administrative Authority shall notify the Permittee in writing of the RAS's deficiencies, and specify a due date for submittal of a revised RAS to the Administrative Authority. In addition, the Administrative Authority may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

## **VIII.J. RISK MANAGEMENT PLAN**

Within ninety (90) days of the Administrative Authority's approval of the RAS, the remedy/remedies proposed for selection shall be documented and submitted in the Risk Management Plan. The Permittee shall propose corrective action remedies in accordance with Chapter IV of the RCRA Corrective Action Plan (Final), May 1994, OSWER Directive 9902.3-2A or as directed by the Administrative Authority.

**VIII.J.1.** The Risk Management Plan shall at a minimum include:

**VIII.J.1.a.** A summary of the remedial alternatives for each AOI and the rationale used for remedy selection;

**VIII.J.1.b.** The final CSM with proposed remedies, including locations of AOIs addressed by a risk management activity, COC concentrations that represent the long-term fate and transport of residual COCs and the exposure pathways affected by the risk management activity;

**VIII.J.1.c.** Cost estimates and implementation schedules for proposed final remedies;

**VIII.J.1.d.** Proposed remedy design and implementation precautions, including special technical problems, additional engineering data required, permits and regulatory requirements, property access, easements and right-of-way requirements, special health and safety requirements, and community relations activities;

**VIII.J.1.e.** Remedy performance criteria and monitoring:

The Permittee shall identify specific criteria (such as land use changes, fate and transport model verification and constructed remedy performance) that will be evaluated to demonstrate that the risk management activity implemented will remain protective. A schedule for periodic performance review (such as monitoring data summaries, including graphical and statistical analyses) shall be established to demonstrate that the implemented activities

are consistently achieving and maintaining desired results. Further, a mechanism shall be established to re-evaluate risk management activities in the event the implemented action does not achieve and maintain the performance standards;

**VIII.J.1.f.** Contingency plans; and

**VIII.J.1.g.** Description and schedules for performance reviews.

**VIII.J.2.** After the Permittee submits the Risk Management Plan, the Administrative Authority will review and evaluate the plan and subsequently either inform the Permittee in writing that the plan is acceptable for public review or issue a notice of deficiency.

**VIII.J.3.** If the Administrative Authority determines the Risk Management Plan does not fully meet the remedial objectives, the Administrative Authority shall notify the Permittee in writing of the plan's deficiencies and specify a due date for submittal of a revised Final Risk Management Plan. In addition, the Administrative Authority may require the Permittee to evaluate additional remedies or particular elements of one or more proposed remedies.

**VIII.J.4.** After the Administrative Authority has determined the Risk Management Plan is acceptable for public review, the Administrative Authority shall inform the Permittee in writing and instruct the Permittee to submit the plan as a Class 3 permit modification request in accordance with the requirements of LAC 33:V.321.C.3.

**VIII.J.5.** After conclusion of a sixty (60) day comment period, the Administrative Authority will either grant or deny the Class 3 permit modification request. In addition the Administrative Authority must consider and respond to all significant comments received during the sixty (60) day comment period.

**VIII.J.6.** If the Class 3 Modification request is granted, the Administrative Authority shall prepare a draft permit incorporating the proposed changes in accordance with LAC 33:V.703.C and solicit public comment on the draft permit modification according to Condition VIII.N.3 of this permit.

**VIII.J.7.** If, after considering all public comments, the Administrative Authority determines that the Risk Management Plan is adequate and complete, the Administrative Authority will issue a public notice for final approval the Class 3 permit modification. The resultant modified permit will include schedules for remedy implementation as well as financial assurance provisions as required by Condition VIII.A.5 of this permit.

## **VIII.K. DETERMINATION OF NO FURTHER ACTION**

### **VIII.K.1. NFA-ATT DETERMINATIONS FOR SPECIFIC SWMUs/AOCs**

**VIII.K.1.a.** Based on the results of the site investigations, screening, risk evaluations and risk management activities, the Permittee may request a NFA-ATT determination for a specific SWMU/AOC by submittal of a Class 1<sup>1</sup> permit modification (<sup>1</sup> requiring Administrative Authority approval) request under LAC 33:V.321.C.1. The NFA-ATT request must contain information demonstrating that there are no releases of hazardous constituents from a particular SWMU/AOC that pose a threat to human health and/or the environment.

The basis for the determination of NFA-ATT shall follow the guidelines as described in the RECAP (Section 1.2.1 of RECAP) for each AOI, depending on the MO used.

**VIII.K.1.b.** If, based upon review of the Permittee's request for a permit modification, the results of the site investigations, and other information the Administrative Authority determines that releases or suspected releases from an individual SWMU/AOC which were investigated either are non-existent or do not pose a threat to human health and/or the environment, the Administrative Authority may grant the requested modification.

**VIII.K.1.c.** In accordance with LAC 33:V.321.C.1.a.ii, the Permittee must notify the facility mailing list within ninety (90) days of the Administrative Authority's approval of the Class 1<sup>1</sup> permit modification request.

### **VIII.K.2. FACILITY-WIDE NFA-ATT DETERMINATION**

**VIII.K.2.a.** Upon the completion of all activities specified in the Risk Management Plan and after all SWMUs and AOCs at the facility have been remediated according to the standards dictated by the selected RECAP MO, the Permittee shall submit a summary report supporting a determination of NFA-ATT on a facility-wide basis.

**VIII.K.2.b.** The summary report must include a historical narrative for each SWMU/AOC at the site that includes a summary of the investigation, sampling & analysis, remedial, and confirmatory sampling activities leading to the NFA-ATT request. The basis for the determination of NFA-ATT shall follow the guidelines as described in the RECAP (Section 1.2.1 of RECAP) for each AOI, depending on the MO used. The facility-wide NFA-ATT determination must consider any newly-identified SWMUs/AOCs discovered after submittal of the Risk Management Plan.

**VIII.K.2.c.** The Administrative Authority will review and evaluate the summary report and subsequently either inform the Permittee in writing that the report is acceptable for public review or issue a notice of deficiency.

**VIII.K.2.d.** If the Administrative Authority determines the summary report does not fully demonstrate that all remedial objectives have been satisfied, the Administrative Authority shall notify the Permittee in writing of the summary report's deficiencies and specify a due date for submittal of a revised summary report.

**VIII.K.2.e.** After the Administrative Authority has determined the facility-wide NFA-ATT summary report is acceptable for public review, the Administrative Authority shall inform the Permittee in writing and instruct the Permittee to submit the summary report as a Class 3 permit modification request in accordance with the requirements of LAC 33:V.321.C.3.

**VIII.K.2.f.** After conclusion of a sixty (60) day comment period, the Administrative Authority will either grant or deny the Class 3 permit modification request. In addition the Administrative Authority must consider and respond to all significant comments received during the sixty (60) day comment period.

**VIII.K.2.g.** If, based upon review of the Permittee's Class 3 permit modification request, the results of the site investigations, confirmatory sampling, and other pertinent information, the Administrative Authority determines that all SWMUs and AOCs have been remediated to the selected MO and no further action at the facility is warranted, the Administrative Authority will grant the modification request.

**VIII.K.2.h.** If the Class 3 Modification request is granted, the Administrative Authority shall prepare a draft permit incorporating the proposed changes in accordance with LAC 33:V.703.C and solicit public comment on the draft permit modification according to Condition VIII.N.4 of this permit.

**VIII.K.2.i.** If, after considering all public comments, the Administrative Authority determines that all activities specified in the Risk Management Plan have been completed and that all SWMUs and AOCs have been remediated to the selected MO, the Class 3 permit modification for facility-wide NFA-ATT will receive final approval. The CAS permit conditions will remain a part of the modified permit in the event that the remedial actions taken fail to maintain the established performance standard and to address any SWMUs/AOCs discovered at a later date.

### **VIII.K.3. CONTINUED MONITORING**

If necessary to protect human health and/or the environment, a determination of NFA-ATT shall not preclude the Administrative Authority from requiring continued monitoring of air, soil, groundwater, or surface water, when site-specific circumstances indicate that releases of hazardous waste or hazardous constituents are likely to occur.

### **VIII.K.4. ADDITIONAL INVESTIGATIONS**

A determination of NFA-ATT shall not preclude the Administrative Authority from requiring further investigations, studies, or remediation at a later date, if new information or subsequent analysis indicates a release or likelihood of a release from a SWMU/AOC at the facility that is likely to pose a threat to human health and/or the environment. In such a case, the Administrative Authority shall initiate a modification to the Permit according to LAC 33:V.321.

### **VIII.L. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY-IDENTIFIED SWMUs AND POTENTIAL AOCs**

**VIII.L.1.** The Permittee shall notify the Administrative Authority, in writing, of any newly-identified SWMUs and potential AOCs (i.e., a unit or area not specifically identified during previous corrective action assessments, RFA, etc.), discovered in the course of ground water monitoring, field investigations, environmental audits, or other means, no later than thirty (30) days after discovery. The Permittee shall also notify the Administrative Authority of any newly-constructed land-based SWMUs (including but not limited to, surface impoundments, waste piles, landfills, land treatment units) and newly-constructed SWMUs where any release of hazardous constituents may be difficult to identify (e.g., underground storage tanks) no later than thirty (30) days after construction. The notification shall include the following items, to the extent available:

**VIII.L.1.a.** The location of the newly-identified SWMU or potential AOC on the topographic map required under LAC 33:V.517.B. Indicate all existing units (in relation to other SWMUs/AOCs);

**VIII.L.1.b.** The type and function of the unit;

**VIII.L.1.c.** The general dimensions, capacities, and structural description of the unit (supply any available drawings);

**VIII.L.1.d.** The period during which the unit was operated;

**VIII.L.1.e.** The specifics, to the extent available, on all wastes that have been or are being managed at the SWMU or potential AOC; and



**VIII.L.1.f.** Results of any sampling and analysis required for the purpose of determining whether releases of hazardous waste including hazardous constituents have occurred, are occurring, or are likely to occur from the SWMU/AOC.

**VIII.L.2.** Based on the information provided in the notification, the Administrative Authority will determine whether or not the area is a newly-identified SWMU or AOC. If the area is determined to be a newly-identified SWMU or AOC, the Administrative Authority will inform the Permittee in writing and request that the Permittee submit a Class 1<sup>1</sup> permit modification (<sup>1</sup> requiring Administrative Authority approval) request under LAC 33:V.321.C.1 to add the newly-identified SWMU/AOC to Appendix 1, Table 1 of this permit.

Further, the Administrative Authority will determine the need for further investigations or corrective measures at any newly identified SWMU or AOC. If the Administrative Authority determines that such investigations are needed, the Administrative Authority may require the Permittee to prepare a plan for such investigations. The plan for investigation of SWMU or AOC will be reviewed for approval as part of the current CAS Investigation Workplan or a new CAS Investigation Workplan. The results of the investigation of any newly-discovered SWMU/AOC shall be incorporated into the CSM.

#### **VIII.M. NOTIFICATION REQUIREMENTS FOR NEWLY-DISCOVERED RELEASES AT A SWMU OR AOC**

The Permittee shall notify the Administrative Authority of any release(s) from a SWMU or AOC of hazardous waste or hazardous constituents discovered during the course of ground water monitoring, field investigation, environmental auditing, or other means. The notification must be in accordance with the procedures specified in Conditions II.E.16 through II.E.20 of this permit and based upon the nature, extent, and severity of the release. Such newly-discovered releases may be from newly-identified SWMUs or AOCs, newly-constructed SWMUs, or from SWMUs or AOCs for which, based on the findings of the CSM, completed RECAP Report, or investigation of an AOC, the Administrative Authority had previously determined no further investigation was necessary. The notification shall include information concerning actual and/or potential impacts beyond the facility boundary and on human health and the environment, if available at the time of the notification.

The Administrative Authority may require further investigation and/or interim measures for the newly-identified release(s), and may require the Permittee to prepare a plan for the investigation and/or interim measure. The plan will be reviewed for approval as part of the CAS Investigation Workplan or a new CAS Investigation Workplan. The Permit will be modified to incorporate the investigation, according to the Class 1<sup>1</sup> permit modification procedures under LAC 33:V.321. The results of the investigation of any newly-identified release(s) shall be incorporated into the CSM.

## **VIII.N. PUBLIC PARTICIPATION REQUIREMENTS**

Public participation is an essential element in the implementation of any corrective action program at the facility. The CAS promotes the early and continued involvement of stakeholders in site remediation activity during permit issuance, renewal, or modification. The public is invited to review and comment on the corrective action requirements contained in any draft permitting decisions or draft permit modification documents and the associated plans and reports submitted by the Permittee. The Administrative Authority reserves the right to require more extensive public participation requirements based upon site-specific conditions and other relevant factors (e.g., compliance history, potential offsite impact, community interest, etc.). At a minimum, the public participation requirements shall include the following.

### **VIII.N.1. NFA-ATT Determinations for Specific SWMUs/AOCs**

Based on the results of the site investigations, screening, risk evaluations and risk management activities, the Permittee may request a NFA-ATT determination for a specific SWMU/AOC by submittal of a Class 1<sup>1</sup> permit modification request (<sup>1</sup> requiring Administrative Authority approval) under LAC 33:V.321.C.1. The Permittee must notify the facility mailing list within 90 days of the Administrative Authority's approval of the Class 1<sup>1</sup> permit modification request, in accordance with LAC 33:V.321.C.1.a.ii and Condition VIII.K.1.c of this permit.

### **VIII.N.2. Draft Permitting Decision**

The public may review and comment on the terms and conditions of the CAS during the public notice and comment period of the draft permitting decision. The Administrative Authority shall issue public notice upon preparation of the draft permitting decision in accordance with LAC 33:V.715. During the forty-five (45) day public comment period, the Administrative Authority will accept public comments on the draft permitting decision. At the end of the public comment period, the Administrative Authority will consider and address all public comments and make any necessary revisions to the draft permitting decision. After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permitting decision. The final permitting decision will include a "Responsiveness Summary" detailing all comments received on the draft permitting decision and the actions taken (if necessary) to correct the draft before issuance of the final permitting decision.

### **VIII.N.3. Final Remedy Selection**

The public may review and comment on the terms and conditions of the Risk Management Plan as described in Conditions VIII.J.4 through VIII.J.7 of this permit. If after addressing all public comments the Administrative Authority determines that the Risk Management Plan is satisfactory, the Administrative Authority will prepare a draft permit modification document in accordance with LAC 33:V.703.C.

The draft permit modification document will include a "Basis of Decision". The "Basis of Decision" will identify the proposed remedy for corrective action at the site and the reasons for its selection, describe all other remedies that were considered, and solicit for public review and comments on the Risk Management Plan included in the draft permit modification document.

After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permit modification. The final permit modification will include a "Responsiveness Summary" detailing all comments received on the draft permit modification and the actions taken (if necessary) to correct the draft before issuance of the final permit modification.

#### **VIII.N.4. Facility-Wide NFA-ATT**

Upon the completion of all activities specified in the Risk Management Plan and after all facility remedial objectives have been met, the Permittee may submit a summary report for a determination of NFA-ATT on a facility-wide basis in accordance with Condition VIII.K.2 of this permit. The public may review and comment on the summary report as described in Condition VIII.K.2.b. If after addressing all public comments the Administrative Authority determines that all SWMUs and AOCs have been remediated to the selected MO and no further action at the facility is warranted, the Administrative Authority will prepare a draft permit modification document in accordance with LAC 33:V.703.C.

The draft permit modification document will include a "Basis of Decision". The "Basis of Decision" will provide a summary detailing contamination sources, site investigations, the MO selected for the facility, facility remedial standards, remedial actions, and sampling results demonstrating that the facility remedial standards have been achieved.

After addressing all public comments, the Administrative Authority will issue a public notice for issuance of the final permit modification. The final permit modification will include a "Responsiveness Summary" detailing all comments received on the draft permit modification and the actions taken (if necessary) to correct the draft before issuance of the final permit modification.

**Table 1: Corrective Action Strategy Notification and Reporting Requirements**

Below is a summary of the major notifications and reports that may be required by the Administrative Authority under the Corrective Action Strategy of this Permit in the event of releases requiring RCRA corrective action. The Administrative Authority will notify the Permittee of the notification and reporting requirements during the scoping meeting or another applicable stage of the corrective action process.

<b>ACTION</b>	<b>DUE DATE</b>
Submit Notice of Intent to request use of the CAS to the Administrative Authority for review and comment (Condition VIII.B.1)	Within sixty (60) days of the effective date of this permit (if facility corrective action is required)
CAS Scoping Meeting held between facility and Administrative Authority (Condition VIII.B.2)	Within sixty (60) days of submittal of the Notice of Intent
Submit Progress Reports on all activities to the Administrative Authority (Condition VIII.C.1)	Schedule to be determined by the Administrative Authority on a case-by-case basis
Make available other reports relating to corrective action to the Administrative Authority (Condition VIII.C.2)	Upon request of the Administrative Authority
Provide briefings to the Administrative Authority (Condition VIII.C.3)	As necessary and upon request by the Administrative Authority
Submit Conceptual Site Model (CSM) (Condition VIII.D) and facility Performance Standards (Condition VIII.A.2) to the Administrative Authority	Within one-hundred and twenty (120) days after the scoping meeting
Perform Interim Measures (Condition VIII.E)	As determined by the Administrative Authority on a case by case basis
Submit Corrective Action Strategy (CAS) Investigation Workplan for the facility investigation to the Administrative Authority (Condition VIII.F)	Within one-hundred and eighty (180) days after the CAS Scoping Meeting
Implement site investigation activities under CAS Investigation Workplan according to approved schedule (Condition VIII.G)	Within fourteen (14) days of receipt of approval by the Administrative Authority
Submit RECAP Report to the Administrative Authority (Condition VIII.H)	Within ninety (90) days of completion of the site investigation
Submittal of Remedial Alternatives Study (RAS) to the Administrative Authority (Condition VIII.I)	Within ninety (90) days of completion of approval of the RECAP Report by the Administrative Authority
Submit Risk Management Plan to the Administrative Authority (Condition VIII.J)	Within ninety (90) days of approval of the RAS by the Administrative Authority
Submit requests for unit specific and facility-wide NFA-ATT determinations to the Administrative Authority (Condition VIII.K)	As necessary

Notification of newly-identified SWMUs and potential AOCs (Condition VIII.L)	Thirty (30) days after discovery
Notification of newly-discovered releases (Condition VIII.M)	According to the requirements of Conditions II.E.16 through II.E.20 of this permit

## APPENDIX 1: SUMMARY OF CORRECTIVE ACTION ACTIVITIES

The intent of Appendix 1 is to provide an overview of the history and current status of the corrective action process at the site at the time of issuance of the final permit and may not necessarily provide a definitive regulatory determination for a particular SWMU or AOC. The classification of an individual SWMU or AOC is subject to change by the Administrative Authority based on future geological/hydrogeological conditions and future available information available to the Administrative Authority.

A RCRA Facility Assessment (RFA) dated June 1986, was prepared for EPA Region VI by A.T. Kearney, Inc. The RFA identified 2 SWMUs requiring Georgia Gulf Chemicals & Vinyls (Georgia Gulf) investigation under the RCRA Facility Investigation (RFI). The SWMUs requiring investigation under the RFI were the:

- Ethylene Dichloride (EDC)/ Vinyl Chloride Monomer (VCM) Manufacturing Complex
- Phenol Manufacturing Plant

The corrective action for the EDC/VCM Manufacturing Complex and the Phenol Manufacturing Plant are being addressed independently of one another and each have their own individual RFI Workplans and Reports.

### EDC/VCM Manufacturing Complex

The EDC/VCM Manufacturing Complex is approximately 1900 ft. x 1400 ft. Constituents of Concern (COCs) have been detected in various locations within the boundaries of the EDC/VCM Manufacturing Complex. The following COCs have been detected in soil and/or groundwater:

- 1,2-dichloroethane
- 1,1-dichloroethylene
- chloroform
- trichloroethylene
- vinyl chloride
- thallium

Several AOCs within the boundaries of the EDC/VCM Manufacturing Complex were investigated under the RFI. However, due to the close proximity of the AOCs to each other within the EDC/VCM Manufacturing Complex, a global sampling approach to collect soils and groundwater data representative of all AOCs was developed and implemented. Below, a basic corrective action history is presented for the EDC/VCM Manufacturing Complex.

1/11/96 Georgia Gulf submits a Preliminary Report and RFI Workplan  
4/29/97 LDEQ issues comments on the RFI Workplan  
12/22/97 Georgia Gulf submits response to LDEQ's comments on the RFI Workplan  
5/13/99 LDEQ issues 2<sup>nd</sup> set of comments on RFI Workplan  
8/13/99 LDEQ approves the RFI Workplan

10/1999 Georgia Gulf initiates Phase I RFI field activities  
6/9/03 Georgia Gulf submits the Phase II RFI Workplan  
03/2004 Georgia Gulf initiates Phase II RFI field activities  
3/31/05 Georgia Gulf submits the Phase II RFI Report/MO 1 RECAP Evaluation  
9/11/06 LDEQ issues comments on the Phase II RFI Report/MO 1 RECAP Evaluation  
11/27/06 Georgia Gulf submits response to LDEQ's comments on the Phase II RFI  
Report/MO RECAP Evaluation  
3/9/07 LDEQ issues 2<sup>nd</sup> set of comments on the Phase II RFI Report/MO 1 RECAP  
Evaluation

#### Phenol Manufacturing Plant

The Phenol Manufacturing Plant is approximately 575 feet x 500 feet. Constituents of Concern (COCs) have been detected in various locations within the boundaries of the Phenol Manufacturing Plant. The following COCs have been detected in soil and/or groundwater:

- 1,1,2-trichloroethane
- 1,2-dichloroethane
- alpha methyl styrene
- chloroform
- cumene
- ethylbenzene
- benzo(a)anthracene
- benzo(a)pyrene

Several AOCs within the boundaries of the Phenol Manufacturing Plant were investigated under the RFI. However, due to the close proximity of the AOCs to each other within the Phenol Manufacturing Plant, a global sampling approach to collect soils and groundwater data representative of all AOCs was developed and implemented. Below, a basic corrective action history is presented for the Phenol Manufacturing Plant.

1/16/96 Georgia Gulf submits a Preliminary Report and RFI Workplan  
4/29/97 LDEQ issues comments on the RFI Workplan  
3/15/99 Georgia Gulf submits response to LDEQ's comments on the RFI Workplan  
1/2/02 LDEQ approves the RFI Workplan  
5/8/02 Georgia Gulf initiates Phase I RFI field activities  
10/3/03 Georgia Gulf submits the Phase II RFI Workplan  
12/8/03 LDEQ approves the Phase II RFI Workplan  
3/19/04 Georgia Gulf initiates Phase II RFI field activities  
3/30/05 Georgia Gulf submits the Phase II RFI Report/MO 1 RECAP Evaluation  
9/18/06 LDEQ issues comments on the Phase II RFI Report/MO 1 RECAP Evaluation

### CAS Process

Georgia Gulf has completed significant corrective action investigations and submitted several reports to LDEQ regarding the SWMUs at its Plaquemine Facility under the previous RFA/RFI Process. Under the new CAS process, both SWMUs are considered to be in the RECAP Report Phase due to the fact Phase II RFI Reports/MO-1 RECAP Evaluation Reports have been submitted for both the EDC/VCM Manufacturing Complex and the Phenol Manufacturing Plant. After LDEQ approves the Phase II RFI Reports/MO-1 RECAP Evaluation Report for a particular SWMU, Georgia Gulf will be required to submit a Remedial Alternatives Study (Condition VIII.I) for that SWMU and from that point on follow the CAS timeline detailed in Condition VIII, Table 1.



TABLE 1. SUMMARY OF CORRECTIVE ACTION ACTIVITIES\*

<i>AOC or SWMU Number/Area Name</i>	<i>AOC/SWMU Description</i>	<i>Status of Activity</i>	<i>Corrective Action</i>	<i>EDMS Document ID #/ Approval Date</i>
EDC/VCN Manufacturing Complex	The EDC/VCN Manufacturing Complex is approximately 1900 ft. x 1400 ft. The primary COCs are: EDC, chloroform, trichloroethylene, vinyl chloride, and thallium. The MO-1 RECAP Report was submitted 03/31/05.	RECAP Report submitted	TBD <sup>1</sup>	32764991
Phenol Manufacturing Plant	The Phenol Manufacturing Plant is approximately 575 feet x 500 feet. The primary COCs are: phenol, chloroform, cumene, ethylbenzene, EDC, benzo(a)anthracene, and benzo(a)pyrene. The MO-1 RECAP Report was submitted 03/30/05.	RECAP Report submitted	TBD <sup>1</sup>	32763689

<sup>1</sup> - "To be determined" – The need for corrective action will be determined subsequent to the completion of the CAS Investigation Workplan and the Administrative Authority's approval of the RECAP Report

# **ATTACHMENT 1**

# **ATTACHMENT 1** **LIST OF FACILITY DOCUMENTS INCORPORATED** **IN THE PERMIT BY REFERENCE**

**LAD057117434-OP-RN-1**  
**AI#2455**

DOCUMENT TYPE	APPLICATION /DOCUMENT DATE	ELECTRONIC DATABASE MANAGEMENT SYSTEM (EDMS) DOCUMENT ID	COMMENTS
Arrangement with local authorities	11/23/2005	33684394	Volume I of the Responses to NOD(1), pages 57 & 69 of the EDMS Document
Closure Plans	11/23/2005	33681758	Volume II of the Responses to NOD(1), pages 209-379 of the EDMS Document
Contingency Plan	11/23/2005	33684394	Volume I of the Responses to NOD(1), pages 48-132 of the EDMS Document
Inspection Plan and Schedule	01/31/2000 06/09/2006	7189749 34322214	Volume III of the Permit Renewal Application, pages 135-146 of the EDMS Document 7189749 Volume II of the Responses to NOD(2), pages 298-299 of the EDMS Document 34322214
Security Plan	01/31/2000 11/23/2005	7187719 33681758	Volume I of the Permit Renewal Application, pages 125-128 of the EDMS Document 7187719 Volume II of the Responses to NOD(1), pages 13-14 of the EDMS Document 33681758
Personnel Training Plan	01/31/2000 11/23/2005	7190138 33684394	Section 2 of Volume III of the Permit Renewal Application, pages 93-100 of the EDMS Document 7190138 Volume I of the Responses to NOD(1), pages 235-242 of the EDMS Document 33684394
Operations Plan	01/31/2000	7157719	Volume I of the Permit Renewal Application, pages 69-76 of the EDMS Document
Waste Analysis Plan	11/23/2005 06/09/2006	33684394 34322214	Volume I of the Responses to NOD(1), pages 207-234 of the EDMS Document 33684394 Volume I of the Responses to NOD(2), pages 300-303 of the EDMS Document 34322214